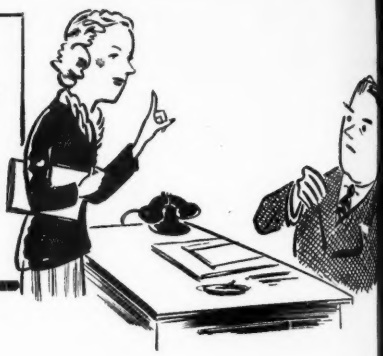
Public Utilities

FORTNIGHTLY

April 25, 1940

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

"I don't like that sign, Mr. Watts!"



"YOU mean that sign in the Main Street window? What about it?"

"It says 'Silex with Stove—$4.95'. Why, that stove alone is worth a window!"

"Wha-at? A stove's a stove, isn't it?"

"Not that stove. You see, it's SELF-TIMING!"

"What does that mean?"

"It means that the water and the coffee are kept together just the right number of seconds *to make perfect coffee every time.*"

"But doesn't any coffee maker do that?"

"That's what *you* think! No other coffee maker has a self-timing stove. It's a patented feature of Silex. So you can't guarantee perfect coffee every time with any other brand!"

"But you *can* guarantee it with Silex?"

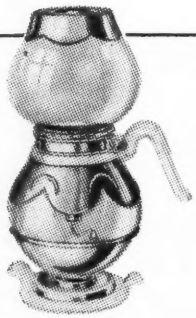
"I'll say you can, Mr. Watts—and you SHOULD!"

"Then I'll say we will! Get hold of that display man and the advertising manager. We're going to feature SELF-TIMING SILEX!"

"That's the stuff, Mr. Watts. And don't forget it's the self-timing stove that makes women use their Silex every day—that's an average of 87 KWH a year per meter!"

Perfect Coffee Every Time!

That's the tip-off. Your Silex representative would like to help you plan a promotion on this exclusive Silex feature that will put more KWH on your load.



Every Electric Silex has a Self-Timing Stove!

Just shut off the current when the water gets up and Silex brings it down . . . as perfect coffee! It's an exclusive Silex feature—patented so it can't be copied. Good reason why women want the stove when they buy Silex (and that boosts sales totals—electric models priced from $4.95 to $29.95). Good reason, too, why they *use* the stove when they take it home. (And that adds KWH to your load!) Illustrated—"Saratoga" Electric, $6.45 retail, 8-cup size, ivory trim.

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Public Utilities Fortnightly

VOLUME XXV *April 25, 1940* NUMBER 9

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

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Pages with the Editors

As the SEC moves along in its reorganization program under the celebrated §11 of the Holding Company Act, the privately owned utility industry seems to be of two minds about conforming with SEC demands for "integration."

Perhaps it would be more realistic to say that the industry is hoping to take two bites out of the cherry. First, there is the implied challenge contained in the recently filed reply of the Engineers Public Service Company, which observers freely predict will result in a new court battle over the constitutionality of §11 as administered by the SEC. Three or four years ago such a court battle might have aroused keener interest in nonutility circles. But now the opinion widely prevails, rightly or wrongly, that the Supreme Court of the United States, as presently constituted, is quite likely to give a "green light" to § 11.

Of course, the court may ultimately limit the interpretation of that provision by the SEC in certain specific cases. But this would take considerable time. So it is not surprising that, having thus cast their legalistic anchor to the windward, holding company executives are now busy exploring the numerous and puzzling possibilities of "conformance" with § 11. The task might be considerably easier if the SEC had laid down a detailed pattern as to what would and what would not be permissible. But this, of course, is impossible, not only by very nature of the subject matter involved, but for economic and political reasons which are too obvious to need discussion.

And so the holding companies go on working out this tentative plan and that tentative plan with the end in mind that one of these alternative programs may fill the bill to the satisfaction of the SEC and without undue violence to the interest of private owners and management.

M. L. SINDEBAND

Despite modern legislation, horse-and-buggy technique is still being employed in corporate reorganization proceedings.

(See Page 515)

Lacking any definite guides as to the broader questions of compliance with § 11, it may be helpful at this point to accumulate at least a more efficient tool kit for effecting reorganizations which may eventually be ordered. In other words, even though everyone seems to be pretty much in the dark as to how serious the actual surgical operations on the various holding company systems may turn out to be, it would be a wise precaution to collect and prepare efficient instruments for doing the job as neatly and as quickly as possible.

One such instrument, which seems to be badly needed right now, is a short cut in the actual mechanics of holding company reorganization. It stands to reason that if and when holding company systems are to be substantially reorganized, assets will have to be shifted, new companies brought into existence, and existing organizations dissolved.

In the leading article of this issue we present an interesting plan for dealing with the numerous factors and equities involved in such situations in a relatively short time and with a minimum of effort. This plan is not, of course, proposed as any absolute substitute for detailed regulatory investigation. But it could be useful as a handy slide rule, to measure what might be done in working out various combinations of corporate reorganizations. At least, as a great potential time saver, we thought this suggestion was worthy of study and analysis in regulatory and industrial circles.

M. L. Sindeband, author of this opening

article, is now a consulting engineer in New York city. He graduated from Columbia University (EE, '07), is a Fellow of the American Institute of Electrical Engineers, and a director of Utilities Power & Light Corporation. Evidence of impressive operating background is shown in MR. SINDEBAND'S former executive posts as vice president of the American Gas and Electric Company, American Brown Boveri Electric Corporation, Ohio Electric Power Company, Reserve Power & Light Company, and Columbus, Marion & Delaware Electric Company.

ANOTHER recent regulatory development which has public utility executives literally scratching their heads has been the trend towards a system of automatic, detailed accounting. This has been variously described as the Continuing Property Record (in New York state), the Perpetual Inventory system (Wisconsin), and by other names elsewhere. Probably there are some mechanical differences between these systems, but the objective seems to be about the same.

THE objective, in other words, is to carry property accounting refinements to such a point that utilities will live in a sort of statistical goldfish bowl, enabling regulatory authorities at any time and upon short notice to determine the fair value of a utility's property. The idea sounds good in the abstract but, like many improvements, it all costs money.

IN this issue we present an article by a sympathetic expert on the subject of Continuing Property Records which poses an interesting question. Is it not possible that some utility companies, which might otherwise be disposed to restrict their compliance with the admittedly expensive new requirements, are stopping just short of the point where the new accounting system could be of considerable benefit to the companies themselves? If so, what is the best way to go about setting up, within the utility industry, mechanics for obtaining the greatest benefits to be derived from Continuing Property Records?

THE article by JOSEPH B. KLAINER (starting page 535) undertakes to outline a general program under just such circumstances. MR. KLAINER, a native of Milwaukee, Wis., graduated from the Massachusetts Institute of Technology in engineering administration in 1935. He is also a graduate lawyer from the North Eastern University Evening Law School ('31), and a member of the bar in Massachusetts. He has had considerable background and experience in various accounting and auditing capacities. He engaged in special rate case analyses work in New York between 1932 and 1939. During that time he made special studies for the public service commission of the state of New York. He is now associated in consulting service with Maurice R. Scharff, New York city.

JOSEPH B. KLAINER

Continuing Property Records are bound to prove of more importance, regardless of valuation theories.

(SEE PAGE 535)

AS this issue goes to press, committees of both chambers of Congress are engaged in efforts to draft some kind of an acceptable bill which will provide for tax payments by the TVA to local authorities in the southern states where it operates. However, as this session of Congress wears on towards an expected early close in June, chances seem to be increasing that any such bill is likely to get ensnarled in the last-minute jam before adjournment.

THE House Military Affairs Committee is struggling with several bills reflecting different shades of opinion as to what the tax liability of the TVA ought to be. If no version of legislation is enacted at this session, the controversy over displacement of tax revenues previously derived from private utilities as the result of TVA operations is going to continue. An article in this issue discusses the various viewpoints recently made known to the House Military Affairs Committee. What do the local authorities want? What does TVA want? What is the general Federal taxpayer's stake in this controversy?

ANDREW BARNES, author of this article (beginning page 527), is a veteran Washington newspaper correspondent who has followed closely Washington developments in connection with this particular TVA problem.

THE next number of this magazine will be out May 9th.

The Editors

In This Issue

In Feature Articles

In Financial News

In What Others Think

In the March of Events

In The Latest Utility Rulings

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 193–256, from 32 PUR(NS)

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

WALTER W. R. MAY
Director of industrial development, Portland General Electric Company.

"The public ownership issue has retarded for a decade our industrial program."

S. B. WILLIAMS
Editor, Electrical World.

". . . there is nothing to indicate a growth in Diesel stationary power compared to expansion in utility service."

CLAUDIUS T. MURCHISON
President, The Cotton-Textile Institute, Inc.

"Social legislation, once a civic enterprise concerned with the welfare of all workers, has become a battleground for organized groups under opposing banners."

EDITORIAL STATEMENT
Broadcasting.

". . . broadcasters seem to be afflicted or near afflicted with acute juridical jitters, complicated by commission concussion and legislative locomotor ataxia."

MERLE THORPE
Editor, Nation's Business.

"Whereas ten years ago eleven citizens in gainful employment supported one government agent or ward, today these same eleven support three on the government payroll."

JAMES L. FLY
Chairman, Federal Communications Commission.

"There has been a certain tendency in the radio industry toward monopoly—not monopoly in terms, necessarily, of a single company, strictly a monopoly, but more in the nature of a duopoly."

THOMAS E. DEWEY
New York District Attorney.

"I see no [campaign] issue there. Everyone is agreed on them [western irrigation and power projects]. They are developments that are vital to the development of the Northwest."

WENDELL L. WILLKIE
President, Commonwealth & Southern Corporation.

"I believe it [freedom of economic enterprise] results in more efficient business management, in lower prices to the consumer, in more opportunity and better working conditions."

W. GIBSON CAREY, JR.
President, Chamber of Commerce of the United States.

"In our determination to play for the long-term interest of our companies and of the country at large, we must constantly resist the natural temptation to run to government."

HARRY FLOOD BYRD
U. S. Senator from Virginia.

"These [Federal corporations] . . . practically constitute a gigantic fourth branch of government."

BRUCE BARTON
U. S. Representative from New York.

"Why try to cure the ills of too much bureaucracy by adding more bureaus and more bureaucrats?"

PAUL J. RAVER
Administrator, The Bonneville Power Administration.

"No city can afford to give itself away on a silver platter to any and all industries and survive."

JAMES F. BELL
Chairman, General Mills, Inc.

"Our company may not be technically in the business of transportation, but none the less the business of transportation has become our business. The body cannot say to the arteries, 'Your welfare is no concern of mine.'"

JAMES M. FITZPATRICK
U. S. Representative from New York.

"I am frank to state, and I am in sympathy with Bonneville, that I do not think it would be right for the government to go into competition and ruin any investments made by private individuals, and it was never intended by the act that any such thing would happen."

A. R. MACKINNON
Secretary, New York State Telephone Association.

"Perhaps our country's source of statesmen for the future will be the industrial statesmen that we develop now. Business in the future will, without doubt, be more important than politics and trained industrial statesmen will be needed to carry out laws for social betterment."

AUGUSTUS LONERGAN
Former U. S. Senator from Connecticut.

"Many of us have acquired the habit of thinking that the real struggle of man has been along political lines, but a little reflection will bring the conviction that political instrumentalities have been but a means to an end. There can be no political freedom where economic freedom is lacking."

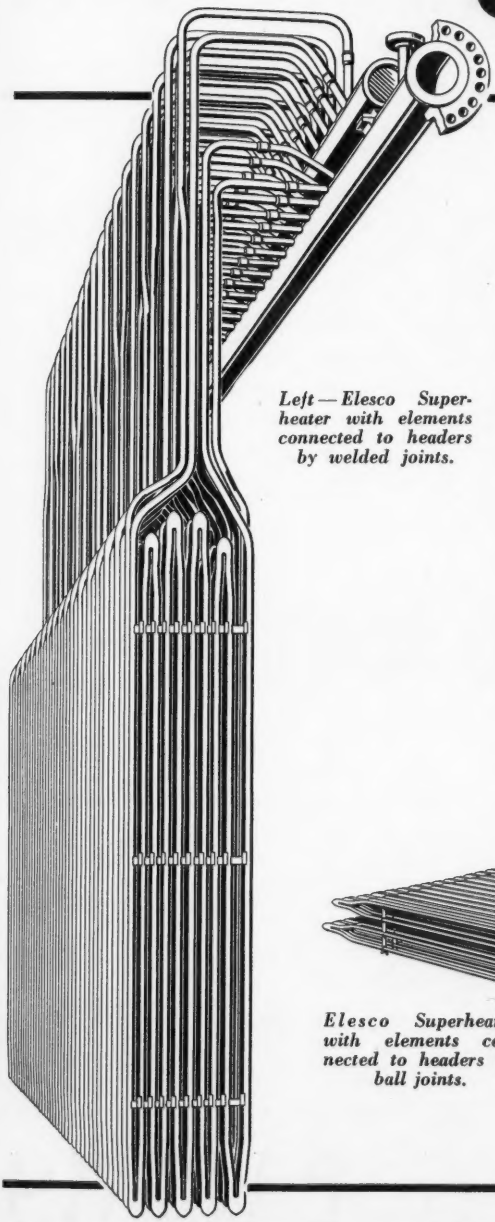
ROBERT A. TAFT
U. S. Senator from Ohio.

"There is nothing which so completely discourages the growth of private business as government competition, and it is impossible to compete with an institution which has no need of balancing its budget. In the TVA, in certain parts of the housing program, and in other fields, the government has gone into business itself."

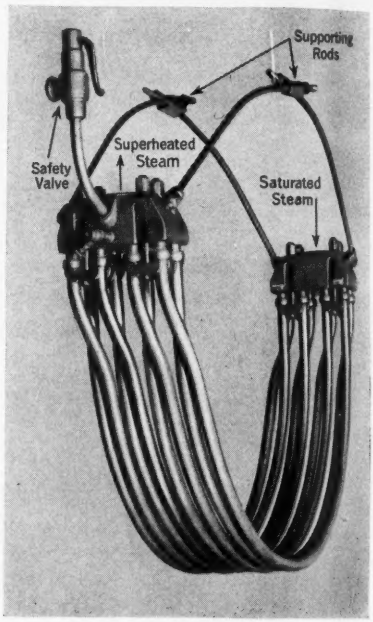
CLYDE M. REED
U. S. Senator from Kansas.

"When we come down to the talking about public morality in the handling of public money, I find it difficult to make a distinction in my mind between Tom Pendergast taking a million dollars out of the Kansas City treasury, and Missouri river promoters inducing the United States to waste $200,000,000 on trying to make the Missouri river navigable."

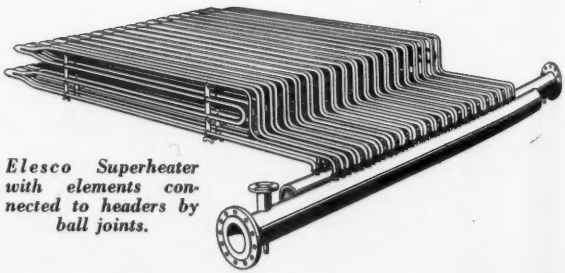
30 YEARS OF



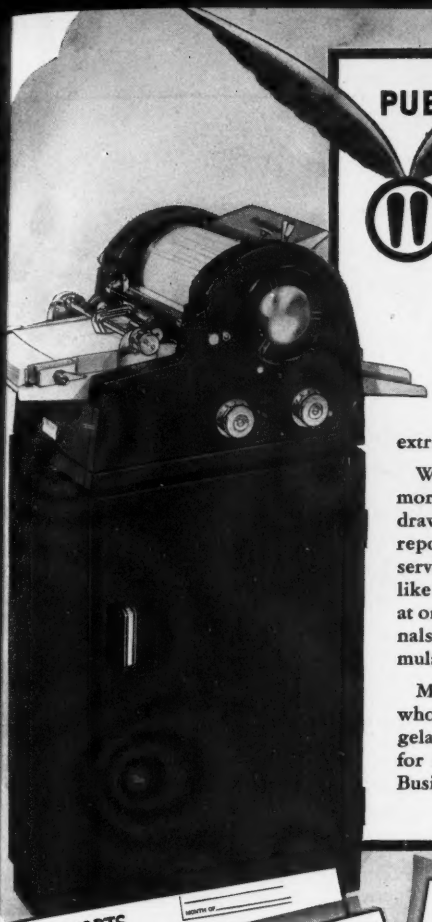
Left — Elesco Superheater with elements connected to headers by welded joints.



Elesco Girth Superheater designed for Horizontal Return Tubular Boilers.



Elesco Superheater with elements connected to headers by ball joints.



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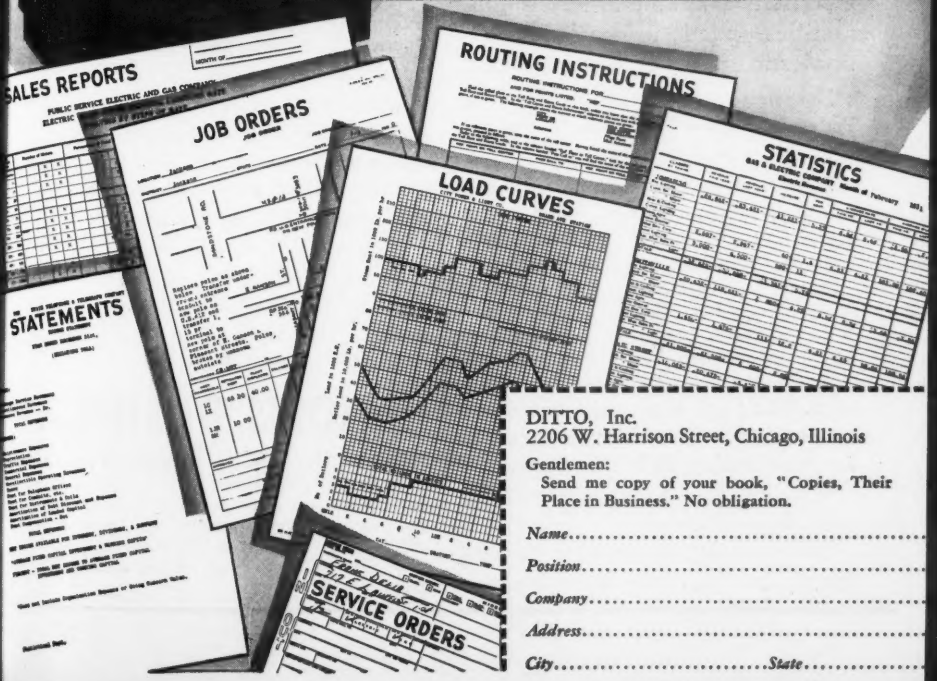

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But suddenly, demagogues cry for Federal control and finally public ownership of power and light.

Laws are passed. One Washington agency puts the industry under drastic restrictions. Another builds power plants, with public money, which compete with utility companies and drive them out. More money is spread among favored districts, states and cities to help them build or buy plants of their own. The total cost to the people exceeds a *billion* 500 *million* dollars. You are contributing, in hidden taxes.

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Where's the sense in switching from business management to political management? Business men built the utility industry. They help shoulder the tax load instead of making it heavier. They pay an average of 18% higher wages than government. Let's back them up. *What helps business helps you.*

This message is published by

NATION'S BUSINESS

It is the 40th of a series contributed toward a better understanding of the American system of free enterprise. If you'd like to express your views on developments now shaping in public policy relative to the utility business, why not write to your Congressman or Senator?

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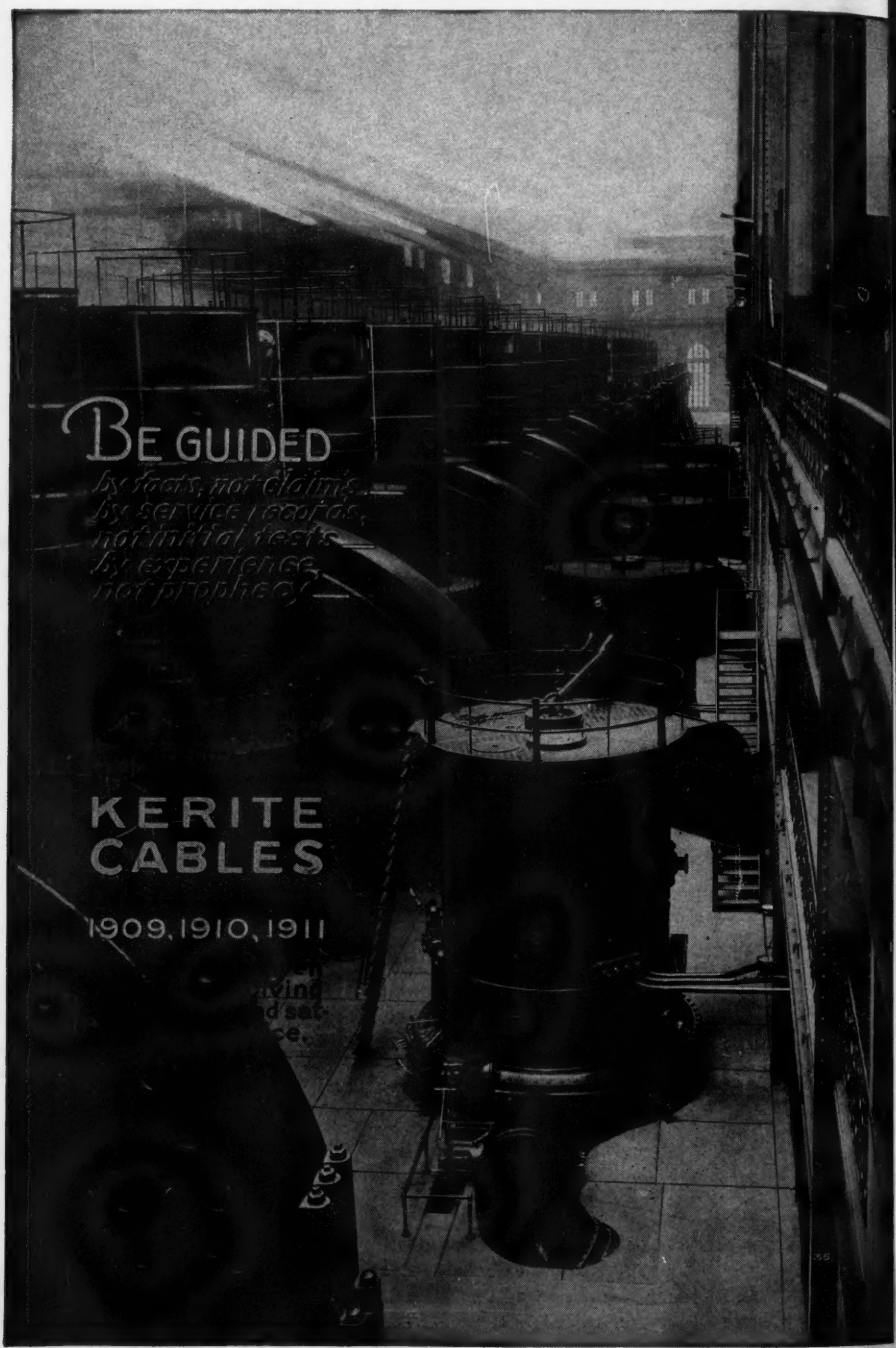
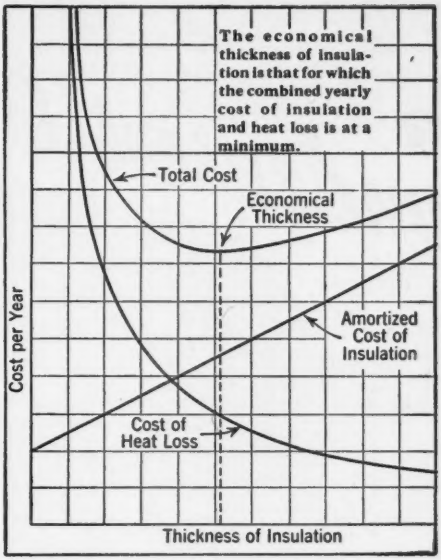


How to SAVE THE MOST MONEY with INSULATION



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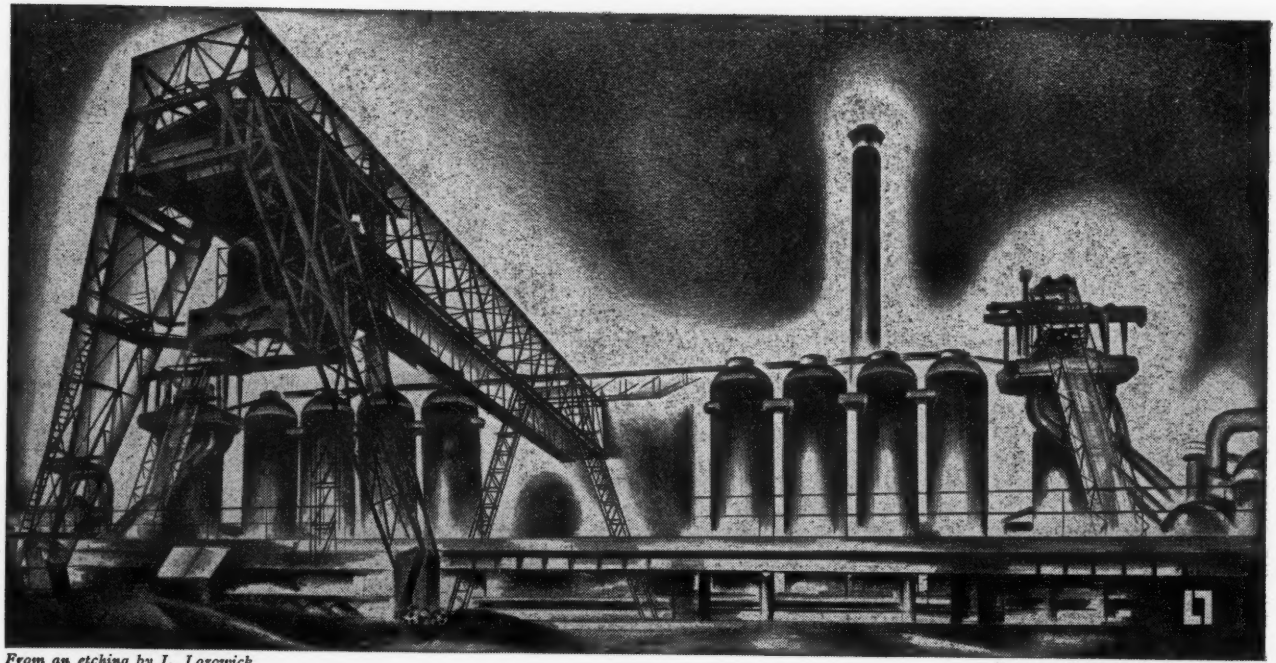
Utilities Almanack

APRIL

25	Th	¶ *Missouri Valley Electric Association opens spring accounting conference, Kansas City, Mo., 1940.*
26	F	¶ *American Society of Civil Engineers, Texas Section, convenes for spring meeting, Galveston, Tex., 1940.*
27	Sa	¶ *Electrochemical Society concludes 4-day spring meeting, Wernersville, Pa., 1940.*
28	S	¶ *Southeastern Electric Exchange will hold annual conference, Roanoke, Va., May 9–11, 1940.*
29	M	¶ *Chamber of Commerce of the U. S. convenes, Washington, D. C., 1940.* ¶ *American Mining Congress starts coal convention, Cincinnati, Ohio, 1940.*
30	Tu	¶ *National Electrical Manufacturers Association will hold spring meeting, Hot Springs, Va., May 12–17, 1940.*

MAY

1	W	¶ *American Society of Mechanical Engineers starts meeting, Worcester, Mass., 1940.* ¶ *Spring conference, Executives of Independent Tel. Co's., opens, Chicago, Ill., 1940.*
2	Th	¶ *Southern Transit Equipment Association opens annual meeting, Memphis, Tenn., 1940.*
3	F	¶ *Indiana Gas Association will convene for session, Evansville, Ind., May 13, 14, 1940.*
4	Sa	¶ *Telephone Pioneers of America, Texas Chapter, start annual convention, Galveston, Tex., 1940.*
5	S	¶ *National District Heating Association will hold annual meeting, French Lick, Ind., May 14–17, 1940.*
6	M	¶ *EEI technical committees open meetings, Chicago, Ill. 1940.*
7	Tu	¶ *Pennsylvania Gas Association will hold annual convention, Skytop, Pa., May 14–16, 1940.*
8	W	¶ *National Fire Protection Association convenes, Atlantic City, N. J., 1940.* ¶ *Indiana Telephone Association begins meeting, Indianapolis, Ind., 1940.*



From an etching by L. Loszowick

Courtesy, Kennedy & Co., New York

Blast Furnaces

Public Utilities
FORTNIGHTLY

VOL. XXV; No. 9 APRIL 25, 1940

A Short Cut towards Utility Holding Company Reorganization

A holding company's assets, generally speaking, consist of rights to the earning power of its subsidiaries. Does this not suggest that, for reorganization purposes, the holding company's assets should be redistributed upon the basis of that earning power? Using the recent proceedings involving the Utilities Power & Light Corporation as a test case, this author has evolved a method for arriving at virtually the same practical results, based solely on earning power, as the SEC and Federal court did after months of litigation and expense, using "value" as a basis.

BY M. L. SINDEBAND

NOTWITHSTANDING the statutory streamlining that has been taking place during recent years in corporate reorganization procedure, it seems apparent that there is still room for improvement—particularly with respect to utility holding company reorganization. Receivership under the old Federal Bankruptcy Act has been superseded by "§ 77B." This, in turn, has been modified by the Chandler Act. Now the SEC has come into the picture through the medium of the Holding Company Act. Yet it still takes months and months of expensive hearings and legalistic pulling and hauling to arrive at any reasonably acceptable reorganization pattern. Why?

Perhaps the explanation can be found in the fact that although the statutory framework for corporation reorganization has been fairly well

modernized, the technique employed is still of the horse-and-buggy variety. The principal bugaboo is the fundamental problem of *Valuation.* No definite criteria for determining value were laid down in the old Bankruptcy Act, in "§ 77B," in the amendment of the latter, or by the courts. The same vague and obscure standards applied in the old bankruptcy proceedings are still being employed. Valuation remains a battleground for conflicting expert opinion. And, unfortunately, this very situation invites special interests to take advantage of the general confusion, thus making reorganization a slow process.

THE recent reorganization of the Utilities Power & Light Corporation is a case in point. These proceedings developed the following jumble of suggestions as to what constitutes "fair value," or a basis for its determination in connection with corporate reorganization: (1) The composite rate base of underlying operating utilities; (2) physical value of the same; (3) historical cost; (4) book value; (5) intrinsic value; (6) earnings. The valuation hearings lasted about five months; the record was voluminous. More time was consumed by wrangles over rival valuation theories than by actual pertinent valuation testimony. Obviously, only the first and last of these factors can have any real bearing on the determination of "fair value" (for reorganization purposes) of a holding company's holdings. The other items can contribute little more than a general smoke-screen effect.

Let us see what can be done about rationalizing this process for finding this "fair value." First of all, it is necessary to clear away a certain amount of underbrush. Certain fundamental assumptions must be made and understood. It must be recognized, for example, that the determination of a utility rate base (by a court or commission) does not necessarily fix its value for all purposes. A rate base is simply a regulatory limitation placed upon a utility's earning ability. As such, strictly speaking, it has no place in a reorganization proceeding under "§ 77B," because the objective of that provision is to *measure* value, whereas a rate base merely *regulates* value. Clearly, regulation and measurement are not synonymous. Therefore, the only relation which a rate base bears to value for reorganization purposes is its influence upon earnings—it does definitely control the earning power of an operating utility.

This brings up the factor of earnings. Are earnings a proper basis for determination of "value" for reorganization purposes? Let us look at the authorities on that point. The SEC, commenting upon the reorganization plan for Utilities Power & Light Corporation, said flatly: "We have consistently held to the opinion that for purposes of reorganization, earning power is the proper criterion of value." The commission further observed that "book values, original or historical costs, and reproduction cost new less depreciation, in determining the value of productive property, are generally of evidentiary significance only in so far as they bear upon the question of earning power."

IN the Genesee Valley Gas Company Case, the SEC stated that "for

purposes of reorganization as distinguished from value for rate-making purposes, earning power becomes in the final analysis a paramount criterion."[1] Thereupon the commission found that the earning capacity of the applicant's property, in that case, indicated "a value far below the total capitalization" (*i. e.*, the valuation figure upon which the reorganization plan was based).

After all, what is a utility holding company, in the final analysis? Is it not simply a corporation which, by virtue of its investments in subsidiary operating companies, controls the general policies and operations of those companies? And since these investments are chiefly in the form of common stock, we can see that the value of a holding company's assets virtually amounts to an equity in the earning ability of its operating utility subsidiaries. And this earning ability (of subsidiary operating utility companies) is, as we know, limited by the regulatory control of state utility commissions or other local authorities. In theory, an operating utility practically conducts its business on a cost-plus basis. Over and above operating expenses (including depreciation and taxes), the utility is allowed to earn a certain rate of return on a rate base fixed by the regulatory authority.

Thus we arrive at the point where this distinction emerges between the holding company and its subsidiary: The value of the holding company's assets is based upon the earning ability of its subsidiaries. The earning ability of its subsidiaries is definitely *stabilized* by regulatory control—a control which places a *ceiling* upon the earning power of the operating companies. This ceiling may vary from time to time, depending on net additions to the property.

Even where no rate base has been officially established for an operating company, so well known is the regulatory technique that an appraisal of used and useful physical properties can be made for the purpose of estimating a utility's rate base and practical earning power. Any group of sincere and experienced utility engi-

[1] As a footnote to the above statement, the commission further said: "Valuation for rate-making purposes is not the same. There the question is how much the utility will be allowed to earn—if it can. Here the question is how much can it earn—even if allowed." (1938) 3 SEC 104, 112.

T. K. Finletter in his "Corporate Reorganization" makes the following statements regarding this question: "The real or economic worth is obviously the value which was intended by the act, and that value, in the case of a productive property, must be measured on the capacity of the property to earn . . . Such an economic valuation is, it is believed, appropriate to proceedings under the Reorganization Acts."

¶ *". . . where no rate base has been officially established for an operating company, so well known is the regulatory technique that an appraisal of used and useful physical properties can be made for the purpose of estimating a utility's rate base and practical earning power. Any group of sincere and experienced utility engineers and operators should, without serious disagreement, be able to estimate the 'reasonable prospective earnings' of a public utility operating company."*

neers and operators should, without serious disagreement, be able to estimate the "reasonable prospective earnings" of a public utility operating company. (Remember that phrase: "Reasonable prospective earnings.")

Of course, all this holds true only for holding companies whose predominant investment is in public utility enterprise. The problem of estimating potential earning power of nonutility or industrial properties (such as steel mills, textiles, hotels, etc.) is much more difficult. This is because the stability of earnings, present in utility properties on account of regulation, is absent in the nonutility field. There, earnings fluctuate so that, even over a considerable number of years, it is hard to arrive at a general average that would provide some index of earnings, without having the result clouded by slump and boom distortions. Fortunately, the earnings of nonutility subsidiaries constitute such a small percentage of the total earnings of our public utility holding companies that, as a general rule, any inaccuracy introduced by this factor would not materially affect the potential earning power of the whole system.

Now, just what is meant by this potential earning power which the authorities seem to agree affords the most logical and economically justifiable basis for the determination of the value of a productive property?

Just as power, in the field of mechanics, is a *rate of doing work,* so earning power, in the field of finance, is a *rate of earning money* expressed as earnings per annum. The potential earning power of a property may be defined as such annual earnings which, though not actually existing at the time of reorganization, may come into existence at some reasonable future time. It is the "reasonable prospective annual earnings" of a property, and may be estimated by adjusting the earnings at the time of reorganization for known factors. The answer as to when those earnings will materialize is entirely dependent on the time it will take for the adjustment factors to become effective. In the case of utility operating companies, some of these factors are:

1. Rate base.
2. Ability to earn allowable return.
3. Rates of neighboring utilities.
4. Municipal ownership agitation.
5. Saturation of load.
6. Proper annual depreciation allowance.
7. Efficiency of management.
8. Economy of operations.
9. Benefits of refinancing.

Having estimated the potential earning power or the "reasonable prospective earnings" of the subsidiaries, how can it be utilized in the problem of reorganization?

Abe Fortas, formerly assistant director of the SEC's public utilities division, in an address before a legal seminar (delivered July 14, 1938), spoke of the commission's attitude in dealing with reorganization plans under the Holding Company Act. In substance, he summarized its approach[2] to test the fairness of a reorganization plan as follows:

I. Arrive at an estimate of value of the property by the capitalization of "reasonable prospective earnings."

[2] In connection with this approach, he further stated: "Some people have called this the logical and mathematical theory of reorganization. I think it can better be referred to as the constitutional theory. It is based upon a regard for the rights embodied in contracts. It insists that to each should be accorded participation in a reorganization plan in accordance with his legal claims."

Rate Base As Limitation on Utility's Earning Ability

"A RATE *base is simply a regulatory limitation placed upon a utility's earning ability. As such . . . it has no place in a reorganization proceeding under '§ 77B,' because the objective of that provision is to* MEASURE *value, whereas a rate base merely* REGULATES *value. Clearly, regulation and measurement are not synonymous. . . . the only relation which a rate base bears to value for reorganization purposes is its influence upon earnings . . ."*

Note: This estimate of value is obtained in the following manner:

Having determined the "reasonable prospective earnings" of each of the subsidiary operating units, an appropriate rate of capitalization is then applied in each case so as to obtain the "value" of each unit. The sum of the equities in such "values" accruing to the holding company plus the value of its other net miscellaneous assets, would then be the value of the holding company's assets.

II. This value is then to be divided among the various classes of security holders and claimants in the order of their priority.

III. Each class must obtain a "completely compensatory" allotment of securities in the reorganized company before any participation can be allowed to a junior class.

The main and vital step in this theory of approach is "value." If, therefore, the method of arriving at the estimate of "value" should prove to be in any way unsound or subject to inaccuracies, then this procedure cannot lead to a just basis for reorganization. Value is dependent on two factors: (1) Reasonable prospective earnings, and (2) the application of a proper rate of capitalization. Can these factors be determined fairly accurately?

WE have already seen that the first factor — reasonable prospective earnings—can be ascertained with reasonable facility, thanks again to the stabilizing influence of utility regulation. But the selection of an appropriate rate of capitalization is a difficult problem, indeed. It defies formula and rests entirely on judgment opinion, wherein lies its weakness. Experts have been known to differ 30 per cent —though always prepared to recite a list of perfectly good and honest reasons to support their judgments.

This rate of capitalization factor of "value," therefore, would tend to make "value," as estimated by the method of capitalized earnings, an unjust basis for the determination of the rights of

security holders and claimants in a plan. That being the case, why use "value" as a basis at all? Why not abandon the controversial factor of rate of capitalization and use "reasonable prospective earnings" alone as a basis?

Sections 77 and 77B of the Bankruptcy Act abandoned the equity sale as a method of determining the right to participate in a plan of corporate reorganization. Instead, that right was determined by an appraisal of the value of the corporate property as a continuous going concern at a given moment in its career. It is time to take another progressive step in the further simplification of the determination of this right of participation, by using the *basis* for appraisal of value, namely, potential earning power, and not "value" in the determination of those rights.

In other words, since we have here a factual situation where a holding company's true value is based upon the earning ability of its subsidiaries, why not short-circuit entirely any arbitrary, intermediary, formal finding of capitalized value, as such? Why not go directly to the true source of that value —the capacity to earn? Upon this dynamic factor (as distinguished from a static appraisal), it is possible to erect a workable, equitable theory of reorganization.

WITH this point of view in mind, it is suggested that the SEC might well consider an approach—at least to test the fairness of any given reorganization plan—based on the following principles:

I. The potential earning power of the assets of a holding company should be made controlling as to whether a class of security holders or claimants must be given the right to share in a reorganization plan. The potential earning power of a public utility holding company may be measured by the "reasonable prospective annual earnings" of its subsidiaries that are *applicable* to the securities and obligations of such subsidiaries held by the holding company. (Earnings applicable to any class of securities represent money earned in whole or in part by such class, regardless of whether or not it can be or is declared out in the form of interest or dividends.)

II. Where there exist "reasonable prospective annual earnings" sufficient to extend to any class of security holders or claimants, *that class* should be considered as having potential equity in the situation and, therefore, the right to participate in a plan.

III. The priorities of the old security holders and claimants should be continued into the reorganized company as far as practicable, and to that end the rights of senior classes, as to income and distribution of assets, must be maintained as far as economic feasibility will permit.

IV. All of the foregoing principles should be employed in arriving at a figure which will not necessarily represent "value," but which will represent the total potential equities of the holding company and furnish a just and fair basis for the allotment of securities in the reorganized company.

V. Each class must obtain a "completely compensatory" allotment of securities in the reorganized company before any participation can be allowed to a junior class.

VI. The plan must be feasible.

INASMUCH as priorities and legal rights play an important part in this new approach, it might be helpful to analyze the capital structure of a typical public utility holding company from

that standpoint. In general, it is divided into three classes: (1) Fixed interest-bearing securities (bonds or debentures); (2) fixed dividend-bearing shares (preferred stock); and (3) equity shares (common stock).

The debenture holder enjoys the status of a creditor and has a prior right to the assets of the company. He is also legally entitled to demand not only the payment of interest at fixed intervals, but the payment of the principal at maturity. But since the assets of a holding company consist, in the main, of equity shares in subsidiary companies, in the last analysis the only claim that the debenture holder has against the subsidiary companies is a prior right to the earnings of the equity shares owned by the holding company when, as, and if they are declared out in dividends. As far as his relation to the holding company is concerned, the debenture holder is—to quote Jerome N. Frank, chairman of the Securities and Exchange Commission—"merely a preferred investor, one whose claims against the corporate income, if there is any income, rank ahead of the claims against the corporate income which the stockholder possesses."

The preferred stockholder's priority as to assets of the holding company is subordinated only to the rights of the debenture holder. He, too, is entitled to a definite income but only when it is earned. However, he has no absolute legal right to the immediate payment of such income.

The status of the common stockholder in respect to claims against the corporate income is somewhat similar in nature to that of the preferred stockholder, except for the following: (a) There is no fixed income; (b) no dividends may be declared on the common stock unless all dividends and arrears are first paid up on the preferred stock; (c) common stockholders, as a rule, have voting rights and control of management.

That, in brief, describes the relative positions as to priorities of the different classes of security holders.

THE problem then resolves itself into one of balancing all relevant factors scientifically; and of obtaining a mathemathical expression for the potential corporate equities which is to be the basis for the allotment of securities in the reorganized company.

In such a process we have four entities with which to deal: "A," Total Outstanding Claims of Creditors (including interest accruals); "B,"

¶ "VALUE *is dependent on two factors: (1) Reasonable prospective earnings, and (2) the application of a proper rate of capitalization. Can these factors be determined fairly accurately? We have already seen that the first factor—reasonable prospective earnings—can be ascertained with reasonable facility . . . But the selection of an appropriate rate of capitalization is a difficult problem, indeed. It defies formula and rests entirely on judgment opinion, wherein lies its weakness.*"

Reasonable Prospective Annual Earnings; "C," Annual Interest on Creditors' Claims; "D," the desired Allocation Base for the allotment of securities in the new company to the various classes of shareholders and creditors of the old company.

Incidentally, "D" does not in any sense correspond to "value"; instead it is the composite potential equity of the holding company in its subsidiaries. However, it is functionally analogous to a rate base. For, just as a rate base places a ceiling on earning power in rate-fixing proceedings, so does an Allocation Base place a ceiling or maximum limitation upon the amount of new securities to be issued by the reorganized company. In short, the Allocation Base is determined specifically for the purpose of furnishing an equitable basis for distribution of such new securities.

Since the most important factors are the claims and priorities of the creditors against the assets and income of the company, it is logical to assume that the reorganization plan must revolve around the creditors and their rights, as a nucleus. It follows that a proper relation must be established between those rights and the reasonable prospective earnings of the company. (It must be borne in mind that the "reasonable prospective annual earnings" of the holding company not only represent the potential earning power of the company, but that they are a measure of the total potential equity as well.)

Now, what is the legal claim of the creditors against the corporate *earnings*? This claim is static. It simply equals the annual interest on outstanding creditor claims. Therefore, the priority of creditors turns out to be the ratio of this claim to the amount of the reasonable prospective annual earnings.[3] Further, since "reasonable prospective annual earnings" is a measure of the total potential equity of the holding company in its subsidiaries, this same ratio also represents the proportional interest of the holding company creditors in that equity.

Next, what is the legal claim of the creditors against the corporate *assets*? This is simply the total outstanding creditors' claims (including interest accruals). That being the case, the outstanding claims must be equal to the proportional interest of the holding company creditors in the composite potential equity of the holding company in its subsidiaries or Allocation Base.[4] If, then, we divide the total claims of the creditors by the abovestated proportional interest, we obtain the Allocation Base.

Once we get our Allocation Base (D), we have, automatically, a maximum limitation upon the amount of face value of securities to be issued by the reorganized company. Furthermore, we can readily see that junior security holders can only participate in a reorganization plan when the Annual Interest on Creditors' Claims (C) is more than covered by the Reasonable Prospective Annual Earnings (B). When that happens, the creditors,

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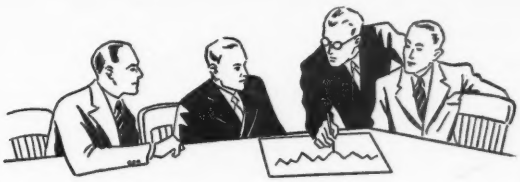
[3] Stated mathematically, the ratio is expressed as $\frac{C}{B}$.

[4] This is expressed by the following equation: $A = \frac{C}{B} \times D$.



Earning Ability Limited by Regulatory Control

". . . this earning ability (of subsidiary operating utility companies) is . . . limited by the regulatory control of state utility commissions or other local authorities. In theory, an operating utility practically conducts its business on a cost-plus basis. Over and above operating expenses (including depreciation and taxes), the utility is allowed to earn a certain rate of return on a rate base fixed by the regulatory authority."

having first call, would receive full compensation for their claims in new securities. As much of this would be in the form of new fixed interest or dividend-bearing stock as sound financial practice and actual income available to the new company would permit. After that, the junior security holders would receive, as their compensation, remaining available new securities (D minus A). The various classes of juniors would, however, divide this remaining compensation in proportion to the "reasonable prospective annual income" applicable to each class.

But suppose that the Annual Interest on Creditors' Claims (C) is greater than the Reasonable Prospective Annual Earnings (B). In that case the Allocation Base (D) would be insufficient to cover creditors' claims (A). Accordingly, only the creditors could participate in the reorganization, and even they would be compensated to the extent of the Allocation Base. Juniors would have to be left out entirely.

Let us apply this theory to test the fairness of the Utilities Power & Light Corporation reorganization plan, which was sponsored by the Atlas Corporation and approved by the SEC, as well as the Federal court, after months of extensive litigation.

The figures outlined at top of page 524 were the approximate status of the existing claims and securities of the company as of July 31, 1939, as taken from the report on the reorganization plan by the SEC.

A study of the testimony and exhibits in the case indicates that the figures outlined at bottom of page 524 are a fair *pro forma* statement of earnings based on the reasonable prospective annual earnings of the subsidiaries applicable to the securities and obligations of the subsidiaries held by the reorganized company.

Debt	*Amount*
Debenture Holders:	
5% Debentures and accrued interest	$26,400,000
5½% Debentures and accrued interest	10,310,500
	$36,710,500
Capital Stock	
7% Cumulative preferred ($100 par value)	$17,817,367
Accumulated dividends on preferred	8,210,836
Class A ($1 par value)	1,622,127
Class B ($1 par value)	1,128,386
Common ($1 par value)	2,166,084
	$30,944,800
Total	$67,655,300

Applying our formula to these figures, we get the following relationships:

A (Total Creditors' Claims)	$36,710,500
B (Prospective Annual Earnings)	2,198,000
C (Annual Interest on A)	1,887,078
[5] D (Allocation Base)	42,690,000

[5] The mathematical equations are as follows:

$$\frac{C}{B} = \frac{1887078}{2198000} = .86$$

$$D = \frac{36710500}{.86} = \$42,690,000.$$

FROM this set-up, we can work out the skeleton for a theoretical reorganization of the Utilities Power & Light Corporation, which would embody the following fundamental elements:

(1) Maximum of new securities, not to exceed $42,690,000.

(2) Out of this $42,690,000, creditors must receive compensation in new securities amounting to $36,710,500.

(3) Since the expected earnings flow to the reorganized company of

Revenue		
Utilities	$2,215,000	
Nonutilities	280,000	
Miscellaneous	5,000	
		$2,500,000
Expenses		
Administration and general expense		302,000
*Earnings applicable to creditors and stockholders		$2,198,000
Interest Requirements—Debt		
5% Debentures and interest	$1,320,000	
5½% Debentures and interest	567,078	
		1,887,078
Earnings applicable to preferred stock		$ 310,922
Dividend requirement—Preferred stock		$1,247,218
Earnings application to other classes of stock		

*These are reasonable prospective annual earnings and are not to be confused with expected earnings flow for the reorganized company. The latter was estimated, after provision for all expenses, at approximately $1,600,000 a year.

	Principal Amount of Shares	
	Approved Plan	*New Theory*
Funded Debt		
4½% Debentures to be issued to creditors	$12,780,000	$12,780,000
Capital Stock		
5% Cumulative preferred stock ($50 par) to be issued to creditors	$ 9,585,300	$ 9,585,300
Common stock ($4 par, issued at $6) to be issued to creditors	2,390,795 shs.	2,390,867 shs.
to be issued to holders of old preferred stock	890,869 shs.	996,583 shs.
	3,281,664 shs.	3,387,450 shs.
Total capitalization	$35,491,956	$35,915,100
Allocation base	$42,055,284	$42,690,000

approximately $1,600,000 would not cover full compensation of $36,710,500 in the form of fixed interest or dividend-bearing securities, creditors should be issued such preferred securities in an amount commensurate with the annual earnings flow of $1,600,000 and take the balance of their claim in common stock.

(4) Since there is a balance available in new securities after the full compensation of creditors, preferred stockholders are entitled to participate in the reorganization in the proportion which such remaining coverage bears to their total interest.

(5) Thus, the preferred shareholders would receive in new securities the difference between $42,690,000 and $36,710,500, or $5,979,500 in the form of common stock. On the basis of $6 per share, used in the approved plan, this would equal approximately 996,583 shares, or 5.6 shares of new common stock in exchange for each preferred share in the old company. (This compares with 5 shares allotted in approved plan.)

(6) Class A, Class B, and common stockholders would be wiped out of any participation for lack of coverage.

Finally, let us compare the approximate capitalization of the reorganized company and the distribution of the new securities under the approved plan with the plan worked out according to the formula on p. 524. The comparison is outlined above.

The comparison readily shows us that the results of the proposed method do not vary materially from the plan actually worked out by the SEC and the Federal court. Needless to say, it could have been worked out at considerably less time, expense, and effort by the use of the new method.

But, there are other advantages to be gained by this proposed method. Though intangible, they do exist, and their origin can be traced to the fundamental substitution of potential earning power as a controlling factor in such proceedings. Here are four such benefits:

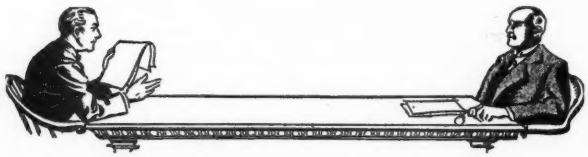
(1) Reduction of judgment testimony by experts to a minimum.

(2) Harmonizing reorganization proceedings with the gradual drift of the investor towards the proposition that a property cannot be worth more than it can earn (even though asset value and earnings are interfunctional).

(3) Elimination of that prolific source of controversy in the determination of "fair value," *i. e.*, rate of capitalization.

(4) Recognition of rights and priorities of creditors and security holders in a fair, legal, and scientific manner.

The problem of reorganizing is not an easy one. An attempt has been made here to devise a simple approach—every step of which can be analyzed and understood. It is only when judicial and regulatory bodies become thus equipped with a practical and realistic understanding of the steps involved that both creditors and shareholders can be assured of that "fair and equitable" treatment in reorganization proceedings which is intended by the legislators.



Democratic Conservation of National Assets (and Periods)

"WE challenge any period of history to show such a profound influence upon the progress of a people as that administration (Democratic) has shown for the last five years. We see agriculture, for the first time, sharing with industry the government's earnest efforts for aid; we see the purchasing power of the farmers raised by billions of dollars, and a great effort made to give the wage earner the country over not only the recognition of the Biblical principle 'that the laborer is worthy of his hire' but the power to consume the products of the farm; we see Federal regulations of security issues and stock exchange for the protection of the investor and the honest trader; we see a purging of certain features of the nation's public utilities—an agency that regulates the nation's network of communications systems, and assures not only an orderly development and protection of these important agencies from the viewpoint of the investors but likewise gives an assurance that the marvels of the radio shall not be selfishly employed to undermine the morals of the American home; we see a rejuvenated Maritime Commission building a merchant marine to do honor to the American flag and to give greater security to the American people; we see an insistence upon the consciousness in the Federal courts that they, too, have a responsibility for a nation's progress, and in the nation a determination that not even the judiciary is above a legitimate concern for the public welfare; we see prohibitions against price discrimination between buyers of commodities of like grade and quality so as to injure or destroy the weak competitor; we see further reforms in the banking structure added upon the noble base of banking reform laid by Woodrow Wilson and Carter Glass; we see something that had been considered as impractical as a child's dream becoming an actuality—insurance of small bank deposits so as to secure and to stimulate a nation's thrift; we see an enlargement of the nation's enjoyment of mechanical and electrical devices—electric power going into the rural districts to entertain and to comfort the occupants of the lonely farm home; we see great power reservoirs harnessed and made subservient to a nation's needs; we see the deserts irrigated, floods brought into greater and greater control, the forests protected, and a nation's dwindling timber resources being restored; we see a wasting soil preserved against erosion, . . .; we see the heart of the nation lifted, the dull countenance of a dejected people illuminated with hope, the weak eyes of the despairing revived with determination, the heart of a great nation beating confidently and patriotically in united resolve that we shall continue our march forward.

—CLAUDE PEPPER, *U. S. Senator from Florida.*

TVA Tax Hangover

There are two schools of thought concerning the expense of maintaining the benefits bestowed by the Federal government on the Tennessee valley through the TVA. One is to the general effect that people in the valley should not look a gift horse in the mouth. The other is to the effect that since the Federal government has given the horse it should continue to buy oats for it.

By ANDREW BARNES

"BUDDY, can you spare a guy a dime?"

If you can, there are six states and scores of counties and hundreds of villages and towns that would like to have it very much. They are in a ludicrous, albeit somewhat pathetic, position before the Congress of the United States, hats in hand, bedeviling Uncle Sam for some relief from the more abundant life.

Years ago the New Deal made their eyes water with visions of Elysian prosperity, and Congress set out to make greener the green pastures of the great Tennessee valley. It loaded them with such a wealth of the more abundant life, to the present tune of $300,000,000 and the ultimate tune of $550,000,000 in dams, penstocks, reservoirs, power lines, alphabetical agencies, flood control, navigation, conservation, experiments and whatnot, that the fat of the land has literally overwhelmed them.

Tennessee, Alabama, Georgia, Mississippi, Kentucky, and North Carolina, and scores of counties, school districts, and municipalities within those states now are like the Negro minister who delivered an overly efficacious prayer for rain. He got a flood. And as he stood waist-deep in water with his flock, the good parson intoned another prayer:

"O' Lawd, we thank you fo' all dese blessings. But looka heah, Lawd, we only axed fo' a rain. Dis heah's carryin' things too far!"

DESPITE all the theoretical arguments for and against TVA, despite the volumes that have been written about it, one fact stands out above all others—local officers from the six states where the New Deal largess has flowed most fulsomely are back before Congress saying, "For Lord's sake, give us some relief!"

They have waked up to the fact that

the greener pastures turned out to harbor thistles—thorns in the knotty problems of state, county, and municipal finance. Having obtained their Promised Land, they now want Congress to step in and save them from bankruptcy threatened by the loss of taxable properties. They want the Congress to pass a bill requiring the TVA to reimburse them for the taxes they have lost through its operations.

And they are begging, pleading, and demanding of Congress that the remedial action be immediate and direct. A dozen bills have been pending before the House Military Affairs Committee to bolster tottering local financial structures, keep the schools from closing for want of revenues, and carry on local governments. Other identical bills are pending in the Senate.

"Representatives of counties and taxing districts," said House Committee Chairman Andrew J. May, a Kentucky Democrat, "have appeared and presented dismal and sickening pictures of the results of government ownership and operation of utilities in direct competition with private industry.

"I AS chairman of the House Military Affairs Committee, along with all the members of that committee, am confronted with the extremely grave and difficult legislative problem of how to provide relief to school districts and counties that have been completely annihilated and destroyed so far as government functions and activities are concerned," he told the writer. "County attorneys, county judges, principals of high schools, and other interested citizens charged with the administrative function of local governments have appeared and told tales of woe almost unbelievable, if we, as a committee, did not know that they are true.

"The county attorney of Polk county, Tennessee, has just completed his testimony and the revelation of the effect of this transfer of private industries to government ownership presents a dismal picture in that county, and likewise along the entire extent of the Tennessee river. Scores of counties and taxing districts in Tennessee, Alabama, Georgia, Mississippi, Kentucky, and North Carolina will be destroyed. The county and other witnesses frequently stated 'We are wiped out,' or 'We are destroyed,' or 'We are ruined,' or 'We are down.' "

It seems almost unbelievable that the situation Chairman May depicted would have been unforeseen as the logical result of the TVA operations. It is as simple as addition. Every time you take a private utility, a piece of farm land, or other property, into the TVA, it becomes tax free, for Chief Justice John Marshall a hundred years ago determined that U. S. agencies are not subject to local taxes. What the TVA acquires, the states, counties, and other governments lose. They know it now.

ON March 18, 1939, Governor Rivers of Georgia approved a bill providing for local taxation of U. S. government corporations. It was an open attempt to get at the Tennessee Valley Authority's vast properties and recoup local finances, but under the Supreme Court's ruling, following the precedent established by Marshall, it was plainly an unconstitutional effort. The states can do nothing.

Representative May estimated that

Tennessee and its local treasuries alone will lose $3,800,000 in annual tax revenues. Stanley J. White, auditor for the Tennessee Railroad and Public Utilities Commission, placed the direct loss to the state treasury in the 1940-41 fiscal year at $925,818.

Even Senator Norris of Nebraska, father of the TVA and as diligent a defender of public power as ever sat in Congress, recognizes the seriousness of the situation. On July 31, 1939, he introduced a bill to "render financial assistance" to local governments in the TVA region.

When the bill authorizing the TVA to buy properties of the Tennessee Electric Power and southern Tennessee companies was before Congress, Mr. May wanted to write into it a provision that the TVA should assume the tax burden, in a fair measure, formerly carried by the private utilities. He was defeated. Congress moves slowly, but bankruptcy never loses time.

The TVA estimated for the House Appropriations Committee this year that the potential initial tax displacement accruing from its operations in the six states would aggregate $3,538,400. It estimated that $94,275,000 was removed from tax-roll assessments by its purchases of utility properties.

It estimated Tennessee's state and local government annual loss of revenues at $3,101,700; Alabama, $242,500; Mississippi, $114,850; Kentucky (where TVA developments are now only partially completed) at $3,800; and North Carolina at $2,400.

This, however, does not give the entire picture. Other taxes are lost and will be lost to states and local governments as the TVA expands and more and more assessable property and utility income is transferred from the sphere of possible taxation over to government ownership. The TVA estimates are very conservative, according to Mr. May.

Certain other pertinent facts stand out. Taking Tennessee as an example, it is found from the TVA's figures that the total assessed valuation of the state since 1932—the depth of the depression—has shrunk $200,000,000, to $1,496,229,000 in 1938. Realty assessments declined $100,000,000, personal property $20,000,000, and public utility assessments remained about the same. But—note this—in the TVA

¶ "If *the TVA plan is working out in reality as it did on paper, why cannot those Tennessee valley municipalities supplement their faltering taxes with levies on new industries, the increased numbers of automobiles, washing machines, refrigerators, electric pianos, and other tangible personal property? Why haven't they tapped these sources of revenue? The best answer to this question is that a hard-pressed government with the power to tax never passes up any bets, and if there were any revenue to be obtained from these sources they would have had it long ago.*"

The TVA's Position on Tax Replacements

By HARCOURT A. MORGAN
CHAIRMAN, TENNESSEE VALLEY AUTHORITY

In any consideration of the tax subject, it is essential to begin with an understanding of the relationship between the Tennessee Valley Authority and its wholesale customers. The authority does not engage in the business of distribution and sale of electricity at retail; its major function is to operate the generating plants and transmit the power to the retail distribution systems owned by municipalities and rural coöperative associations to whom the power is sold under wholesale power contracts. These municipalities and coöperative associations own and operate their own distribution systems and distribute the electricity to the customers.

In the contracts between the authority and these wholesale customers, the rates at which the power is to be distributed to the consumers are agreed upon. These rates are sufficient and as their income accounts show, they do cover all state, county, and local taxes previously levied upon the distribution properties. Accordingly, the fact is that the consumers are now paying in their rates a sum equivalent to the taxes previously assessed against these systems. The problem arises from the fact that these revenues, previously collected by the state, county, and local taxing authorities, are now paid into the general funds of the municipalities. This, therefore, is not a question of "tax loss"; it is merely one of equitable adjustment of the tax collections among the state and its subdivisions.

Clearly, this is neither a Tennessee Valley Authority nor a Federal problem. The question as to whether the states and counties should recapture their portion of these payments is one of state policy that can be solved only by state legislation. The absence of such legislation accounts for a large portion of the so-called tax losses, since the taxes previously levied upon the distribution properties, owned not by the Tennessee Valley Authority but by the municipalities and local coöperatives, account for a large proportion of the total amount.

The remaining adjustment—and the only one with which the Federal government is directly concerned—arises out of the fact that the generating plants and transmission lines previously subject to state and local taxation are now owned by the Federal government through the Tennessee Valley Authority and are, therefore, exempt from the taxing power of the state and its subdivisions. Here again it is an error to assume that the rates at which the power produced by Tennessee Valley Authority is sold are not sufficient to cover the taxes previously paid upon these properties.

The fact is that the wholesale rate at which the authority sells its power to the retail distributors is sufficient to cover all of the costs of producing and transmitting such power, plus a margin of about 15 per cent. That margin paid by the consumers in their rates is sufficient to cover taxes upon these properties. The issue is whether it should be utilized for that purpose.

The theory of the Tennessee Valley Authority Act as now written is that the revenues derived from the sale of power over and above the cost of production should be returned to the Federal Treasury for the purpose of liquidating a part of the cost of the navigation and flood-control program. The pro-

gram authorized by the statute is a multipurpose one in which power is the paying partner.

The revenues over and above the power costs are available either for reimbursement to the Federal Treasury or for payment of state and local taxes, or for both. The issue the Congress must determine is not whether the rates should include allowance for taxes, because they already do, but is rather what method should be adopted for apportioning these revenues between the Federal government and the local taxing authorities.

In determining this question it is necessary to weigh the great benefits that have been conferred upon the states and communities in this area by the expenditure of Federal funds against the admitted fact that the transfer of these properties from private to public ownership has resulted in some communities in temporary but serious fiscal problems.

The Tennessee Valley Authority Act already provides for payment of 5 per cent of Tennessee Valley Authority revenues to the states in lieu of taxes. (Tennessee Valley Authority revenues are now about $15,000,000 per year.) This percentage will in the course of a few years produce sufficient funds to replace all the taxes previously paid by the power companies on the facilities taken over by the authority. However, one of the factors which aggravates the tax problem is that the formula specified in the Tennessee Valley Authority Act for the division among the states of the payments to be made by Tennessee Valley Authority does not work out equitably in the light of the situation as it has actually developed since the act was passed. Were it not for this factor, there would be no tax problem which could not be solved without additional legislation.

For this reason the bill now pending in Congress [Norris bill providing for taxes to be paid by TVA], which has been recommended by the directors of the authority, provides in substance that the authority shall pay to the affected states 10 per cent of the gross proceeds derived from the sale of power at wholesale, this percentage being graduated downward until it reaches 5 per cent in eight years, this rate to be paid in each fiscal year thereafter. It is further provided that the minimum annual payment to each state shall not be less than the 2-year average of the state and local ad valorem property taxes levied against transmission and generating property purchased and operated by the authority in each state plus that portion of reservoir lands allocated or estimated to be allocable to power.

The total payment for each fiscal year is to be apportioned among the several states upon the basis of the amount of power sold in each state and the book value of the power property owned within each state. The bill declares it is the intention of the Congress that each state shall redistribute these payments, or a portion thereof, to the counties and other local taxing districts affected by the program of the authority. It is to be especially noted that under this bill the payment to be made by the authority to each state is to be at least equal to the total state and local ad valorem property taxes previously levied against the power property owned by the authority.

Enactment of these bills will, we believe, solve equitably the only phase of this temporary problem, which is a direct responsibility of the Federal government.

The foregoing statement is from the Congressional Record, *January 4, 1940, p. 105.*

reservoir counties every classification of property fell in value within the same period.

Under § 13 of the TVA Act, the authority is required to return to Alabama and Tennessee 5 per cent of the gross operating revenue from those states. In 1939 Alabama received $141,802 and Tennessee $101,253—an amount far below their tax losses from the TVA operations. In Tennessee, the Constitution requires that these rebates be distributed according to population, thus sending the lion's share to the richer and more populous counties.

THE Federal government itself lost $133,863 in electric energy, capital stock, social security, and miscellaneous excise taxes through the purchase of Tennessee Power; and the state franchise, gross receipts, motor vehicle, unemployment insurance, local ad valorem, gasoline, and property taxes were whittled down in the transaction.

Scores of counties' officials have telegraphed and written to Chairman May that they would lose from 25 to 65 per cent of their revenues through the switching of property from private to public nontaxable ownership. This may seem small to persons dealing only in billions of dollars. But to local governments it is just as serious as it would be to the Federal government if it were suddenly faced with the job of recouping three and a half billion dollars of lost revenues. What if Federal revenues shrank 50 per cent? Imagine the chaos that would follow such an event!

The problem is, to local government, the same problem that a merchant selling $50,000 of goods per year, for cash, would face if his best customer called and withdrew $25,000 of that trade.

Could either the Federal government or the merchant avoid bankruptcy in such circumstances? Certainly not. The municipalities now begging relief must raise existing taxes unconscionably to recoup lost revenues, or get help through Congress. Whatever is taken from TVA income to reimburse them is reflected directly on the nation's taxpayers, for it delays that much longer the retirement of TVA bonds and keeps us paying interest on them for that time.

CHAIRMAN May mentioned Polk county as an example. Harry J. Schaefer, the county attorney, estimates that Polk county in 1939 collected $118,489 from the Tennessee Electric Power Company, or 40 per cent of its total income. The county has a bonded debt of $1,833,000. Public ownership has absorbed 129,000 of the county's 277,000 acres. Before TVA, Schaefer's average light bill was $5; after TVA it was $4.70. There are only 1,103 users of TVA power in the county, and it is impossible to levy on them a consumers' tax sufficient to recoup the lost $118,489. They simply wouldn't pay it. If the loss is to be absorbed in other ways, it means placing a tax burden of $7.56 per year on every man, woman, and child in the county. Schaefer told Chairman May that Polk county is "certainly much worse off" than ever before. The schools, serving 4,000 children and employing 130 teachers, are "facing disruption," and county and municipal finances are tottering.

The TVA: Investment or Rat Hole?

"If the TVA is the New Deal's Gift to Man, why should not it retire this obligation and at the same time recoup a little on its own investment? How long will the Southeast have to wait before the greener pastures really get green and the milk and honey start flowing? Ten years, or a hundred? Is perpetual motion in economics flunking as flatly for TVA as it flunked for the famous cat-and-rat ranch?"

Other county and local officials—including Governor Prentiss Cooper of Tennessee—have come in with similar pleas. Loss of local revenues has been urged before the House Appropriations Committee as one reason why TVA localities must have more WPA money; they haven't got the local revenues to care for their unemployed. Here the knife is cutting the Federal pocketbook both ways.

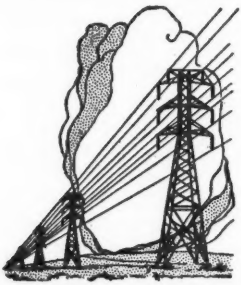
According to Chairman May the TVA has brought local governments in scores of cases face to face with stark and utter bankruptcy. This brings up an important question. If the TVA is a great public power project for the people of the entire country, why should not all of its revenues go back into the Federal Treasury? The TVA region is supposed to be deriving great benefits from cheaper electric power, industrial development, and the expenditure of huge sums of government money within its boundaries.

If the TVA plan is working out in reality as it did on paper, why cannot those Tennessee valley municipalities supplement their faltering taxes with levies on new industries, the increased numbers of automobiles, washing machines, refrigerators, electric pianos, and other tangible personal property? Why haven't they tapped these sources of revenue? The best answer to this question is that a hard-pressed government with the power to tax never passes up any bets, and if there were any revenue to be obtained from these sources they would have had it long ago.

Another question is raised. Why should the United States taxpayers, having poured into the Southeast a bounty beyond the dream of a Croesus, be required to dig down deeper into a

sickly wallet and reimburse that region for the financial hangover it suffers from too much Federal largess? They have paid the freight once. If the TVA is the New Deal's Gift to Man, why should it not retire this obligation and at the same time recoup a little on its own investment? How long will the Southeast have to wait before the greener pastures really get green and the milk and honey start flowing? Ten years, or a hundred? Is perpetual motion in economics flunking as flatly for TVA as it flunked for the famous cat-and-rat ranch?

Is public power to be pushed to a *reductio ad absurdum?* Remember Fort Peck, Montana; Grand Coulee, Washington; and Bonneville, Oregon. Gigantic power projects, all. There too the Promised Land has been conjured. Will those people wake up to find that they have destroyed local tax valuations, wrecked municipal and school financial systems, and bankrupted local governments? Look at TVA.



The Biggest Holding Company of All

"ALL *the New Deal's furor against holding companies reaches the height of absurdity when we consider the political edifice it has built about itself. It represents one of the most powerful holding companies the mind of man yet has been able to conceive. Strangely, too, many of its subsidiaries have not been chartered under any Federal statute but have been organized under the laws of Delaware, the prolific mother of trusts. Their main stem is the Federal government, but aside from this connection they all act independently.*

"Yet like a fertile brood-hen the government has hatched numerous eggs from which have emerged the component members which now constitute Uncle Sam's mastodon holding corporation. To mention only a few of the long list of alphabetical organizations, we have the TVA, SEC, HOLC, FTC, CCC, FPC, NYA, NLRB, WPA, FHA, SCC, and FHA. Many of them have the power to issue their own securities to finance their requirements. How they conduct themselves is not the concern of John Citizen, but when it comes to the private holding companies, then all the New Dealers feel a call to arms, for such a hydra has no right to exist."

—LOUIS GUENTHER,
President and publisher, The Financial World.

Continuing Property Records For Regulatory Accounting

The Continuing Property Record—a relatively new instrument in the modern technique of utility regulation—is apparently here to stay. Its adoption by more and more state commissions is definitely in prospect. What are the utility companies going to do about it? Will they coöperate enthusiastically, or render only perfunctory compliance? This article sets forth some definite suggestions for an enlightened utility policy along this line.

By JOSEPH B. KLAINER

For more than a decade there has been a noticeable general trend in utility regulation towards more automatic technique. The approach has been from several angles. For example, there is the Wisconsin perpetual inventory, established in 1934, which emphasizes mechanics for property valuation.[1] There is the somewhat older and perhaps better known Washington plan for semiautomatic rate adjustments on a sliding scale, resulting in a profit-sharing basis. There is the interesting Continuous Rate Investigation formula of procedure, recently worked out by the California commission. And now we have the Continuing Property Records system originally included by the public service commission of the state of New York as part of its uniform system of accounts, and subsequently prescribed by special orders.

These are all efforts from different approaches towards simplified but adequate regulatory procedure to eliminate uncertainties of the past which have bred so much litigation and dissatisfaction with commission regulation generally. They have as a common objective simple, adequate, and sound mechanics for protecting the interests of utility ratepayers, investors, and the tax-paying public at large. In a sense, this trend might be characterized as an attempt to arrive at some system of effective automatic regulation.

A number of states have already followed suit in adopting the New York Public Service Commission's plan for establishing Continuing

[1] "The Wisconsin Commission's Continuous Inventory Plan." By Edmund D. Ayres. Parts 1 and 2. Public Utilities Fortnightly, Vol. 13, p. 755, June 21, 1934; Vol. 14, p. 20, July 5, 1934.

Property Records. Uniform classifications of accounts prescribed by the National Association of Railroad and Utilities Commissioners and the Federal Power Commission definitely imply their use as a matter of practical compliance with their accounting requirements. It is, therefore, not surprising that the industry as a whole is steadily becoming "Continuing Property Record conscious."

Of course, we have long had Fixed Capital records for the purpose of recording chronologically the amounts of money spent in making utility property changes; but it was only after the idea emerged that such records could be a systematic continuing inventory of plant and equipment at cost that this modern conception of plant accounting came into being.

UTILITY management at first accepted this new conception with reservations. It meant an initial large expenditure as well as continuing expense. It meant more regulation. It meant discarding certain routines and establishing new ones with the attendant cost and confusion of retraining and reorganizing personnel. Most important, under the "fair value" rule laid down in Smyth *v.* Ames (and reaffirmed so often in subsequent Supreme Court decisions in one way or another), Continuing Property Records did not seem very important from the standpoint of rate regulation.

The emphasis laid on reproduction cost (as distinguished from original cost) by the courts during the last three or more decades led to the practice of having appraisal engineers make physical inventories on a reproduction cost basis, rather than develop elaborate accounting systems. These appraisals were naturally expensive, especially in view of the limited use that could be made of them; namely, the establishment of a spot reproduction cost as of a particular time for a particular case.

However, even in the courts, during this period of unquestioned supremacy of the Smyth *v.* Ames doctrine, there was a growing dissatisfaction with the awkward procedure that resulted. This found expression in the dissenting opinions of Justices Holmes and Brandeis during the 20's. With the recent changes in the U. S. Supreme Court there is at least a reasonable basis for speculation as to whether this minority view of the last decade may not become the majority view in the near future. Furthermore, the possibility of using properly segregated property records for estimating reproduction cost by trending original cost attaches to such records considerable importance even under "fair value" rule.

AT any rate, Continuing Property Records are bound to prove of more and more importance — whether "fair value," or "prudent investment," as exemplified by historical cost, or "original cost" as defined by the recently prescribed uniform systems of accounts, should ultimately prevail. As the New York Court of Appeals said in a recent case involving temporary rates, "at least there is some accuracy in these figures; they can be fixed with some certainty and are not dependent altogether on speculative expert opinion."[2]

[2] Bronx Gas & E. Co. *v.* Maltbie (1935) 268 NY 278, 10 PUR(NS) 1; Yonkers Electric Light & P. Co. *v.* Maltbie (1935) 245 App Div 419, 12 PUR(NS) 26.

In setting up Continuing Property Records we run into two sets of problems:

(1) Those associated with the establishment of the system;

(2) those associated with maintaining it successfully.

It is not the purpose of this discussion to make any specific recommendation as to methods or to present detailed solution of these problems. It simply seeks to suggest a constructive approach to them as a whole in order to overcome the unsympathetic first reaction which has resulted in a virtual paralysis of the industry's initiative and ingenuity in handling the whole subject.

At the outset it must be conceded that, in order to have a successful solution of this problem, there must be a real desire for Continuing Property Records and a true appreciation of their potential value. This wholehearted acceptance of the idea is essential to overcome a very understandable human tendency to avoid uncovering old errors, to let them remain undisturbed. Such errors, resulting from past carelessness or policies no longer acceptable, are bound to be brought to light with the advent of such records. Indeed, therein lies one of the real opportunities for management in establishing Continuing Property Records. It gives the industry a chance of cleaning house once and for all and thereby to abandon its defensive position.

On the other hand, if management continues to be unsympathetic to these requirements and to accept them as an unwelcome burden, its compliance will tend to be makeshift and just short of the details and effort that would produce records of such value as to justify their expense from the standpoint of management, as well as regulation. The difference between a perfunctory system and a vital system can be relatively small.

The task of setting up a Continuing Property Records system (which we shall hereafter simply call CPR) falls naturally into two parts:

(1) Taking a physical inventory of the property;

(2) determining the original cost and allocating it to the different property units already enumerated in the physical inventory.

So far the industry seems to have placed its emphasis on the first phase, as if that were the predominating one. It appears to be uncertain about the second. And yet, as between the two, the original cost phase is certainly

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worthy of more effort. On the whole, it will prove easier to obtain an accurate and complete inventory to be used for cost allocation, than to arrive at such cost and to complete its allocation in a way that will satisfy regulatory authorities.

With respect to the taking of the physical inventory there are five points of difference from inventories for reproduction cost appraisal purposes which must be kept in mind:

1. In a reproduction cost appraisal the purpose is to arrive at the value of a purely theoretical recreation of the company's property in its present physical status. But the basic inventory for setting up the CPR must show the factual picture of the company's property through its various periods of growth and development, taking full advantage of all factual sources, which vary widely as between companies and as between units of the same property.

2. The reproduction cost appraisal represents a purely hypothetical conclusion as to value without contemplating any further utilization of the result. The CPR inventory is only the first factual step (perhaps the most immediately expensive) for the self-perpetuating record.

3. A reproduction cost appraisal can disregard the relationship between accounting entries and the time element in field construction. The CPR must include a special study of this relationship.

4. The reproduction cost appraisal proceeds on the assumption of present-day conditions as far as the cost figures are concerned, whereas the CPR inventory must reflect all the various cost conditions which applied during the entire period of the company's development.

5. The reproduction cost appraisal is made without regard for the value of the property as recorded by the accounting routines. The CPR inventory is of necessity vitally associated with accounting figures. In other words, in the latter there must be included a self-balancing method to account for the disposition of a host of entries.

Now, when we consider these differences between the two procedures, we can set forth several general principles which should govern the general plan for a CPR inventory and the subsequent cost allocation thereof.

The first general principle is that no CPR inventory work should be undertaken without a clear understanding of the details and form in which the records are to be established and the routines maintained. This will be determined largely by conditions within each company. But unless the inventories assemble all the physical facts which will be required, there may be either subsequent expense and delay for supplementary inventory work or, worse yet, a compromise as to the standards set for the CPR to utilize information made available by the inventory.

The standards for the CPR will necessarily be set at the very beginning. In other words, the system will probably continue on through the years according to the scale on which it was launched. The initial under-

Value of Trained Personnel

". . . poorly trained personnel can easily ruin the best planned system. Background knowledge is an essential attribute for such a trained personnel. The individuals should be familiar with the appearance and purpose of various property items in order to gather intelligent information about them and not be satisfied with mere routine bookkeeping entries. In addition, of course, they must be conversant with accounting principles and have a general knowledge of the physical property as a whole."

taking will deal with property which probably will date back to the company's origin and may continue in service throughout the company's entire history. Therefore, any short cuts should be viewed with suspicion. The setting of high standards at the outset eventually will prove to be real economy.

Another guiding principle should be to make use of the CPR to uncover all possible sources of cost and historical information which may exist through various departments of the company, particularly for the earlier periods. These historical data may prove of vital importance in price allocation and will often explain otherwise abnormal costs.

FINALLY, as part of the job of establishing the CPR, a control should be maintained for the capital changes in "utility plant" which may occur during the period while the work is in progress. Forms should be designed and current changes entered and kept in balance instead of permitting their cost to accumulate in "construction work progress," or blanketed in utility plant accounts. Unless such a control is set up, the utility may find itself faced with another inventory and cost allocation job after the end of its CPR work—all of which would mean more delay and expense.

The personnel for setting up the CPR system is the first important problem. The key man for such an organization might be known, for want of a better term, as the coördinator. It would be his job to blend effectively all the various activities which would have to be carried on simultaneously, such as the physical inventory work, the accounting analyses, and the many different procedures for allocation of original cost to the units of property enumerated by the inventory. The coördinator, therefore, has to be well acquainted with inventory methods and well grounded in accounting theory

and procedure. The ultimate success of the entire system is likely to rest largely on his shoulders.

AFTER a competent coördinator has been selected, a staff should be organized in two groups. One group would be equipped to take physical measurements. This calls for a certain amount of engineering training. The other group would be especially equipped to analyze accounting records and to interpret "Construction Order" or "Work Order" systems. This obviously calls for intimate knowledge of property accounting. Both groups must be prepared to draw up intelligent working papers so as to record their results in a concise and clear manner. Too much stress cannot be put upon the importance of providing for the smooth and speedy recording of the results by means of adequate working papers and routines.

From these two groups, a third must be developed whose function will be to associate construction costs established by the cost analysis with the units of property enumerated by the inventory. Such a hybrid or liaison unit calls for the services of engineering accountants, or, if you prefer, accounting engineers. The best practical way to mold this third group would be to select them from the first two groups on the basis of individual performance.

Inevitably, the problem of staff organization will raise the question of whether the experience of independent consulting valuation firms should be utilized. As a general rule, where such consulting service embracing both accounting and engineering experience is available within one firm or associated firms, time and money can often be saved. However, since such composite service is not generally available, it might be more effective to depend on consulting firms for only the key personnel or for general advisory supervision. Where a consulting service is employed, it should be adequately supplemented with company personnel, in order to furnish the essential background with respect to company affairs, and to be prepared to take over the maintaining of the system.

THE maintaining of the CPR is the continuing function of utility plant accounting. For that reason it is to be distinguished from the *establishment* of the CPR which is the more complicated but a nonrecurring task.

This accounting is essentially the systematic procedure for recording money values which reflect the continual changes in the nature of the plant. While it generally resembles other accounting phases of a utility's business, utility plant accounting must, first of all, summarize and analyze the various expenditures recorded. It must also be kept constantly current throughout the active life of the various property units and sometimes for long periods thereafter.

In planning for such accounting procedure it is necessary to decide on personnel, on a technique for obtaining the necessary data, and on a recording system. A competent personnel is perhaps the most important element because it can overcome or offset shortcomings in the other elements. On the contrary, poorly trained personnel can easily ruin the best planned system. Background knowledge is an essential attribute for such a trained personnel. The individuals should be

familiar with the appearance and purpose of various property items in order to gather intelligent information about them and not be satisfied with mere routine bookkeeping entries. In addition, of course, they must be conversant with accounting principles and have a general knowledge of the physical property as a whole. The CPR personnel need not, however, include professional engineers since the company's operating engineers and construction engineers can assist with technical information.

CPR personnel must be thus qualified in order to determine, for example,

(a) whether a particular expenditure should be charged to capital or to operating or maintenance;

(b) what utility accounts are affected and to what extent by a particular expenditure; and

(c) what entries are necessary to record all the elements concerned in any property change.

PROBABLY the most effective assistance that management can give to the CPR personnel is in the development of the general distinction between maintenance charges and capital charges. Too often past policies on this point have been dictated by expedience. Such a practice must be discontinued under the CPR if either the system or the personnel is to be held responsible.

The CPR personnel should be segregated into a distinct department or division in order to emphasize its responsibility and should report to the chief accounting officer of the company. The work is broad enough and certainly important enough to be given this distinction. The direct supervision over this department should be delegated to an individual who knows the industry, as well as the accounting task at hand. He should be a person of tact and resource in order to eliminate any intradepartmental friction.

WORK of the CPR personnel naturally will fall into three classes of activity: Field inspection, cost analyses, and general office. Obviously, the size of the company will determine the size of the staff as well as the question as to what extent staff members should "double up" in the three classes of activities described.

The emphasis in field inspection for inventory purposes should be on obtaining a complete list of assembled units rather than an inventory of materials. To do this the man making the inspection must have a clear picture of

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the specifications for the units of property and retirement units and a knowledge of the company's policy as to capital replacements and maintenance charges.

In the beginning it is preferable to start out with a rather complete program of field inspection. As the work of maintaining the CPR proceeds, it may become possible to depend upon reports from construction forces supplemented by spot checking in the case of routine extensions. Incidentally, as the need for complete inventory of all construction eases off, the program of field inspection may be arranged so as to include field inventories of cross sections of the company's property for the purpose of disclosing additions or replacements which have been made through maintenance or operating charges. Also every year or two a complete inventory of active equipment accounts, such as Miscellaneous Plant Equipment, or Office and Furniture Equipment, will be found worth while.

Now, we come to the task of cost analysis—the purpose of which is to classify expenditures by associating them with the inventoried units of property. Just by way of running over the main headings, here are eight usual classifications: Materials, miscellaneous supplies, stores expense and indirect material costs, direct labor, transportation, supervisory and indirect labor, engineering, and overhead.

Allocating expenditures among these classifications will vary considerably among companies. A responsible part of the job is improving the procedural technique for such allocation, which, however, should not be carried to the point where analysis becomes pure routine. There should always be a critical examination from the standpoint of reasonableness.

Thus the materials purchased or issued from stores should be checked against data derived from field inspection. This procedure will encourage greater care of issues from stores and accounting therefor. As the accounting improves, the task of reconciling office records with field inspection will decrease accordingly.

In fact, the general momentum of cost analysis will inevitably result in the invention and use of improved forms and other routine devices for carrying out the purpose of the work more effectively. Thus, in the generally useful columnar analysis form sheets, a section of three columns may be provided for showing the reconciliation of field inspection with store issues and direct material purchases, headed:

(1) Quantities per Field Inspection;

(2) Quantities per Construction Ledger;

(3) Variations (quantities and per cent).

Entries in the third column will be made only in cases of materials, such as conductors, where there may be allowable limits of variation. Centering attention on such a check will prove a good safeguard against the temptation to absorb excessive variations.

Intermediate columns can also be used to accumulate the individual expenditures for cost elements which can be allocated in one total. These are generally labor, transportation, and indirect labor costs. This preliminary accumulation will save considerable mechanical effort in the application of ratios.

THE complete analysis of expenditures, therefore, will result in a summary by primary plant accounts of the CPR units (added, altered, or retired) each with its associated cost. This summary is necessary as a final step in analysis work.

In passing it should be noted that the responsibility for all decisions as to accounting entries affecting additions or retirements should be centered with the personnel in charge of maintaining the CPR. This will result in consistency of interpretation as to distinctions between what should be charged to capital and what to operating expenditures.

The general office duties involved in maintaining the CPR consist

(1) of assembling and filing the numerous papers which are developed during the construction and analysis, and

(2) posting the completed analysis to the various forms which constitute the CPR.

In this connection, the CPR personnel should be charged with keeping the official completed work order file for all departments. Work orders may originate in various departments, but it is essential that all related papers should flow to an official and final lodging place where they can be assembled in permanent record form. The CPR department is the logical depository.

The posting of the CPR forms produces the continuing feature of the property record. This makes a costed physical inventory of the property by account classifications immediately available. And, inasmuch as the CPR is in effect a subledger for the general ledger account designated as "utility plant," this posting process involves a balancing with the total cost of the property as carried in the general ledger. This balancing step should be evidenced by an officially initialed trial balance.

BECAUSE an adequate work order system is necessary for obtaining a smooth flow of the data required for maintaining the CPR, one of the first steps should be a thorough review of the company's work order procedure. This may make it apparent that the issue of work orders ought to be centralized in charge of the CPR personnel. Along the same line, intradepartmental correspondence relating to various expenditures should, in some way, clear through the CPR department because they often contain information which would prove of considerable assistance in connection with the final analysis and cost association.

The detail to which the original cost refinements in the CPR should be carried is to some extent a matter of opinion. In general, however, it may be stated that the data should be sufficient to make a continuing inventory and cost of retirement units (either by direct reference or simple calculation) promptly available without the necessity of an extensive field inventory. This suggests that it may be better to err on the side of too much detail and gradually eliminate surplusage on the basis of experience.

In conclusion, the approach to the problem of setting up the CPR must be made with an open mind. Any preconceived idea that the CPR system is unworkable or impracticable will stall the project at the outset. On the other hand, a conviction of the purpose and confidence in the feasibility of the sys-

tem will release creative ingenuity which will yield surprisingly satisfactory results. In this connection, the constantly improving mechanical record-keeping aids are worthy of careful consideration.

THE basic feature of the CPR *from the regulatory standpoint* is to provide a prompt and complete picture of property value as of any given time and on short notice. This eliminates the expense, confusion, and delay of the cumbersome regulatory practices of past years. The basic feature of the CPR *from the property standpoint* should, therefore, be the incorporation of a full support as to the existence of the units of property—so identified that it is possible to draw up a list and check it in the field.

It is well to keep in mind that the CPR can also help to pay its way by eliminating certain other record keeping, established for one purpose or another over a period of years. Therefore a survey from this standpoint may be advisable once the system has been established. In this connection, however, it should be kept in mind that particular conditions may make certain duplication of records quite unavoidable.

In this article an attempt has been made to present the general idea of Continuing Property Records with a more sympathetic viewpoint than has been commonly accepted within the utility industry. For obvious reasons, general features of the problem have been stressed and broad recommendations made rather than specific suggestions applicable to particular cases. If sufficient interest is shown in this general treatment of the subject, separate discussions will be prepared dealing with the broad recommendations in specific terms.

Legal Holiday for Utility Regulation

"I DO not think anyone outside of the government can realize how much freer government can operate in its relations with business, such as the utilities, now that both seem to be rid of the incubus of that self-styled, big-city constitutional lawyer. I am convinced most of our difficulties in this field originated with some fancy lawyers who advised their clients not to work things out with the government, on the theory that these lawyers would be able to defeat the government in the courts, so that no working out of things would ever be necessary."

—HARRY L. HOPKINS,
U. S. Secretary of Commerce.

Wire and Wireless Communication

REOPENING the Federal Communications Commission's hearing on television on April 8th to determine whether research was being unduly retarded, Chairman James Lawrence Fly warned that "this is not to be a trial." No effort, he said, would be made to determine the legal propriety of the promotional activities of the industry or to adopt any rules pertaining to the design or to marketing of receiving sets.

While the hearing was in progress, much of it covering technical ground, reverberations of television were heard on Capitol Hill, where Senator Burton K. Wheeler, chairman of the Interstate Commerce Committee, issued the following statement:

> I am calling a meeting of the Interstate Commerce Committee for Wednesday morning [April 10th] to consider whether or not the committee will recommend the resolution by Senator Lundeen of Minnesota which would authorize an investigation of the action taken by the Federal Communications Commission with relation to television.
>
> Chairman Fly of the Federal Communications Commission has asked to be heard on this resolution before committee action is taken. I have invited him to appear Wednesday morning and am asking Mr. Sarnoff, president of RCA, to appear and explain his position. The committee will hear all interested persons.
>
> The only question to be decided would be as to whether the committee would vote the investigation asked for by Senator Lundeen.

Representative Eugene E. Cox, speaking in the House, said that "what we need is probably an investigation of the broadcasters' trust." He defended the FCC against an attack which, he declared, was based on the charge that it was retarding television. His investigation had convinced him, he added, that the main issue was that the FCC would "not permit the broadcasters' trust" to sell the public "near obsolete" television equipment.

SOUNDING the keynote of the hearing, which was attended by 175 members of the radio industry, including executives, engineers, and attorneys, Chairman Fly said:

> The subjects to which this inquiry is directed concern the present status of television, its research and development, and the problem of the exercise of the commission's statutory duty to issue experimental licenses and to fix the standards for television transmission.

Allen B. DuMont, president of the DuMont Laboratories, Passaic, N. J., was the only witness called on April 8th. Examined and cross-examined, he pointed to flexibility of design in television receiving sets as the safe key to the future. He announced that he had developed a flexible receiver which would handle picture reception in any range from 400- to 800-line texture. By means of a switch, he explained, the operator could select, for example, 441-line or 605-line pictures.

The set was designed, he said, to operate automatically with any synchronization pulse now in use, so that it could pick up the telecasts of the DuMont

transmitter at Passaic or the programs from Radio City through the Empire State building transmitter of the NBC, which employs the standard pulse suggested by the Radio Manufacturers Association.

To protect the public against obsolescence, Mr. DuMont reported, his company guaranteed to keep its present sets up to date until January, 1942. Contending that there is no such thing as final research in radio or television, he went on record for a flexible nonobsolescent system designed to meet any new conditions that might arise. The testimony indicated the views that no revolutionary developments in television were on the immediate horizon and that since a decision must be made some time to "go ahead," the present seemed opportune.

THE fear in some quarters, as disclosed at the hearing, is that if too many sets of one manufacturer are sold they will dominate the market and automatically establish standards. Mr. DuMont estimated that his company had sold from 600 to 800 television sets in the New York area. He said his present transmitter covers from 7 to 10 miles.

When recent television advertisements from *The New York Times* and *The New York Herald Tribune* were offered as exhibits, Chairman Fly ruled that no commercial aspects, legal, property, or merchandising, would be considered by the FCC, and advertisements only as they pertained to evidence of research and experimentation.

When Mr. DuMont was under cross-examination, Chairman Fly asked whether Frank W. Wozencraft, of counsel for the Radio Corporation of America, challenged the jurisdiction of the FCC. Judge Manton Davis, chief counsel for the RCA, replied:

> We most certainly do not challenge the jurisdiction of the FCC to regulate experimental uses of frequencies in transmission or to fix standards of transmission.

The hearings were resumed on April 9th at the Interstate Commerce building. At least nine witnesses remained. The general opinion of radio men was that, as a result of the facts which the hearing will bring out, the "red light" which the FCC flashed on television March 22nd will fade back into the green "go ahead" signal which had been set to permit limited commercialization after September 1st.

SENATOR Lundeen, in asking for an investigation of the FCC's television activities by the Senate Interstate Commerce Committee, made an address over a radio network on April 6th criticizing the commission. He declared that the FCC was throttling the progress of a "new industry" and that Congress should stop such "bureaucratic seizure of power." Incidentally, Senator Lundeen made public for the first time a dissenting opinion by Commissioner Craven, which the Minnesota Senator commended as coming from the "only technically informed man on the commission." In a letter to Senator Lundeen, which was reprinted in the *Congressional Record* of April 5th, Commissioner Craven stated:

> The majority [of the FCC] concludes that recent promotional activities of a television-receiver manufacturer will effectively stop research and freeze technical development in television.
>
> In my opinion, such a contention is absurd on its face, and is not justified by either facts or experience. Nothing can stop scientific research and technical progress in a free democracy if incentive is not discouraged by government. The commission itself, by order of suspension, such as in the instant case, can create such confusion as to retard the development of television and discourage the incentive and initiative of private enterprise.
>
> In my opinion, the technique of television has advanced to the stage where an initial public trial is entirely justified. Such a trial would spur television onward, not only more rapidly, but also more effectively than any other method. I agree with the majority that technical improvements are required in television and I agree that the commission should not approve standards at this time. However, no one can foretell accurately how these technical improvements will be secured and what public reaction will be. It is already obvious that some of the technical methods suggested by the commission in its previous report may not be the best. This is not surprising, since the commission has

had no practical experience in technical research for television or is it equipped to undertake such problems.

* * * *

A LEARNING period of 320 hours or approximately eight weeks, at a subminimum rate of 25 cents per hour, was found to be necessary in order to prevent curtailment of opportunities for employment of telephone operators in the independent branch of the telephone industry in a determination made on April 9th by Dr. Gustav Peck, assistant director of the hearings branch of the Wage and Hour Division.

The statutory minimum would otherwise be 30 cents an hour. Dr. Peck's recommendation, which was approved by Wage-Hour Administrator Fleming, would permit the employment of one learner in an exchange employing up to eight operators; two in an exchange employing from nine to eighteen operators; three learners in exchanges employing nineteen to thirty operators; four learners for thirty-one to forty-four operators; and one learner for each additional fifteen operators employed in larger exchanges.

The order affects only the independent companies not already exempt from the wage-hour statute, which was estimated at around 2,100 exchanges employing approximately 12,500 operators.

* * * *

THE independent telephone industry has shown some concern over the recent long-distance telephone rate reduction negotiated between the FCC and the Long Lines department of the AT&T. While the independent companies do not themselves engage directly in long-distance traffic to any appreciable extent, they naturally participate in the handling of long-distance calls connecting their local exchanges with the long lines division of the Bell system. Compensation for participation by the independent companies in handling such calls has been the subject of recurrent controversy in the past, but agreements governing the sharing of tolls had left the situation fairly peaceful prior to 1937.

With the slashing of long-distance telephone rates by the Bell system during the last three years, however, the compensation of the independent exchanges became correspondingly reduced. Because the recent reduction only affected long-distance calls in excess of 420 miles, the adverse effect on the independent companies was not so drastic as it might have been, had the rate cut been made generally applicable to all long-distance telephone calls. Yet, some of the independents were uneasy as to what might happen hereafter. This was evidenced by an editorial appearing in the March 30th issue of *Telephony*, the journal of the independent telephone industry. It was pointed out that certain rights and interests of the independent companies were being affected in FCC-AT&T closed negotiations.

Along this line, one of the largest independent telephone companies in the United States, the Jamestown Telephone Corporation of Jamestown, N. Y., scored an impressive victory in the New York Court of Appeals on March 12th. (See "Latest Utility Rulings," p. 571.) The case really started in 1931 when the Jamestown Telephone Corporation decided that it was not receiving a fair share of the toll revenues under a 1919 contract with the New York Telephone Company (a Bell subsidiary).

FOLLOWING a cost study, the Jamestown company notified the Bell company that the contract would be terminated in 1932. Both companies continued to handle the toll business so as not to embarrass the public, but the Jamestown company withheld revenue which would have been paid under the terms of the 1919 contract and for this difference, amounting to $189,000, the New York Telephone Company sued the Jamestown company. The Jamestown company won the first round in 1937 when the lower court found no cause for action because the Bell company had continued to operate, in the absence of a contract, on a *quantum meruit* basis.

The second and third rounds were likewise won by the Jamestown company in the appellate division and court of appeals of New York.

Financial News and Comment

By OWEN ELY

Business Turns the Corner

THE six months' stalemate in the stock market has been broken. Probably never before in its history, with the exception of the NRA-devaluation period in 1933, had the market ignored such a sharp advance in business activity, and conversely such a sharp decline. The market had been awaiting (1) real fighting in Europe; (2) Mr. Roosevelt's decision as to a third term; and (3) reassurance that the debacle of 1937-8 (when the F.R. index plunged from 117 to 79 in six months) would not be repeated.

The decline in the heavy industries had been of comparable speed to that in 1937; the question whether it would continue hinged on whether the new inventories built up last fall had to be completely liquidated, or whether a permanently higher level would be considered essential by business men due to war conditions. Leonard P. Ayres' pessimistic forecast and the sober comment of the National City Bank served to check reassurance over favorable factors such as increased exports, large auto sales, higher residential building contracts, etc., and retail trade figures were mistrusted due to the early advent of Easter.

A "sign from Heaven" was needed to bolster waning morale, and this was forthcoming in U. S. Steel's $1 dividend. The market then seized on the Wisconsin primary results, although the anti-Roosevelt interpretation was somewhat strained. A more heartening development was the speech by SEC Chairman Frank before the New York City Bar Association, followed by the favorable reception accorded the Indianapolis Power & Light stock offering.

Last-minute news is mixed, but favorable on balance. Retail trade is off 20 per cent, perhaps due to the change in Easter. Retail motor sales have rebounded sharply, March gaining 40 per cent. Cash farm income is the highest in a decade. Exports for the first six months of the war were up 33 per cent. Steel operations are now holding their own. The stirring new developments in Europe, while bearish in their real implications, have at least disposed of the "phoney war" idea and indicate the important rôle which our national economy must play in world events.

Standard Gas and Electric

STANDARD Gas and Electric recently turned to Washington again for a new executive, SEC Commissioner Mathews following FDIC Chairman Crowley into that system (Northern States Power Company). Mr. Mathews' counsel should prove helpful in aiding the company to meet the requirements of § 11. The Associated Gas system apparently obtained little benefit from installing a Washington executive, bankruptcy following only a few weeks later, but the two cases are quite dissimilar. Standard Gas is, of course, in no immediate danger of bankruptcy, although the threat several months ago that the SEC might cut off dividend income from the Philadelphia Company (source of nearly half its income), owing to traction write-offs, caused a temporary 25-point drop in the company's bonds. (See FORTNIGHTLY, February 15th, p. 228.)

Standard Gas suffers under the double handicap of having both a complicated corporate structure and scattered geographic distribution. Considerable spade-

work will be necessary to work out any satisfactory solution of the integration problems. While one or two top-layer holding companies, such as Byllesby and United States Electric Power, have apparently been sloughed off (the status of the former is in litigation), Standard Power & Light still remains as the nominal top holding company. With its stocks rather dormant on the New York curb, it is merely a shell, dissolution of which has apparently been postponed by SEC doubts regarding the legal status of its bonds. These were fully assumed by Standard Gas some years ago, but may possibly still have a technical claim on the assets of the company whose name they bear.

In addition, there are a number of subholding companies and other corporate deadwood which require elimination if the "grandfather" clause of § 11 is to be strictly observed. On the geographical aspect, the company's operating subsidiaries spread over some 19 states and Mexico, and would apparently have to constitute at least eight "integrated" groups in place of the one or two which are theoretically permitted by the act. (See map, FORTNIGHTLY, April 11th, p. 487.)

The simplest solution, of course, would be to dispose of all properties other than the Philadelphia Company, using the proceeds so far as possible to buy in or redeem outstanding bonds. As indicated below, assets other than Philadelphia Company have an estimated value of about $64,200,000; and, even allowing for some shrinkage, this should be sufficient to retire the company's bonds—par value about $72,228,000, currently selling around 67.

However, it seems doubtful whether the management would be reconciled to such a drastic course.

STANDARD Gas and Electric is currently buttressed by a strong cash position —the 1938 balance sheet (latest available) showing $7,511,830 cash assets, equivalent to nearly two years' bond interest requirements. The company got into trouble over the maturity of its notes but reorganized in 1938, the note maturities being pushed forward to 1948. System capitalization (in the hands of the public) is as follows:

Subsidiaries	
Funded debt	$269,352,300
Preferred stock	137,747,500
Minority equity	24,167,121
Standard G. & E.	
Funded debt	$72,227,500
$7 prior pfd. stock	368,348 shs.
$6 prior pfd. stock	100,000 "
$4 second pfd. stock	757,442 "
Common stock	2,162,607 "

The estimated liquidating value of the assets of Standard Gas and Electric and the corresponding 1938 income and equities may be summarized as follows (all figures in millions of dollars):

States Included		*Estimated Liquidating Value*	*Est. 1938 Inc. Recd. By SG&E*	*SG&E Equity in Net Profits*
Pa. & West Va.	Philadelphia Company	$32.4	$2.3	*$2.3
Okla. & Ark.	Oklahoma G. & E.	14.2	1.2	1.2
California	San Diego Cons. G. & E.	12.3	.8	1.0
	Cal. Oregon Power	6.1	.2	.4
	†Pacific G. & Electric	6.8	.4	..
Kentucky & Ind.	Louisville G. & E.	2.8	.3	.3
Wis., Minn., N. D., Ill., Ia., Mich.	Nor. States Power	1.0	..	..
	Wis. Pub. Service	7.3	.1	.6
Ida., Mont., Or., S.D., Wash., Wyo.	Mountain States Power	2.9	..	..
	Miscellaneous assets	10.8	.1	..
	Total	$96.6	$5.4	$5.8

*Includes only subsidiaries of Philadelphia Company consolidated in 1938.
†Not a subsidiary.

ESTIMATED VALUE OF STANDARD GAS AND ELECTRIC ASSETS

		Market Price About	*Multiplier Used*	*Estimated Value (Millions)*
California				
$2,375,000	Cal. Or. Power deb. 5½/42	102	..	$2.5
4,457 shs.	Cal. Or. Power 7% pfd.	95E	..	.4
13,478 shs.	Cal. Or. Power 6% pfd.	86E	..	1.2
82,061 shs.	Cal. Or. Power common	..	7	2.0
99,387 shs.	San Diego Cons. G. & E. common	..	12	12.3
200,420 shs.	*Pacific Gas & Electric common	34	..	6.8
Colorado				
360 shs.	So. Colo. Power 7% pfd.	..	..	..
6,247 shs.	So. Colo. Power common A	..	..	..
75,000 shs.	So. Colo. Power common B	..	..	..
Ida., Mont., Or., S. D., Wash., Wyo.				
140,614 shs.	Mountain States Power common	21	..	2.9
Minn., Wis., N. D., Ill., Ia., Mich.				
11,600 shs.	No. States Power (Del.) common A	13	..	.1
728,083 shs.	No. States Power (Del.) common B	1¼†	..	.9
13,397 shs.	Wisconsin Pub. Serv. 7% pfd.	106E	..	1.4
900,000 shs.	Wisconsin Pub. Serv. common	..	12	5.9
Kentucky and Indiana				
282,588 shs.	Louisville G. & E. (Del.) common B	..	10	2.8
Oklahoma and Arkansas				
191,000 shs.	Oklahoma Gas & Electric common	..	12	14.2
Pennsylvania and West Virginia				
4,634,530 shs.	Philadelphia Company common	7	..	32.4
Miscellaneous Security Holdings				
39,250 shs.	Market St. Railway 6% pfd.	7	..	.2
25,500 shs.	Market St. Railway second pfd.	..	..	..
61,900 shs.	Market St. Railway common	..	..	..
9,000 shs.	‡Deep Rock Oil & Ref. common	..	..	..
969 shs.	‡Deep Rock Oil & Ref. $7 pfd.	..	..	..
579,132 shs.	‡Deep Rock Oil & Ref. common	..	..	..
$2,900,000	Empresa de Serv. (Mex.)	..	..	..
5,000 shs.	Horseshoe Lake Oil common	..	..	..
1,000 shs.	Tri-State Land common	..	..	..
Other Assets				
$3,444,610	Indebtedness of affiliates not current	..	..	3.4
$6,479,645	Net quick assets	..	..	7.2
	Total			$96.6

* Not a subsidiary (less than 10 per cent owned).

† Class B stock is entitled to only one-tenth the amount of dividends paid on the A common, hence the price is estimated at about one-tenth that of the A stock.

‡ In bankruptcy.

E Estimated.

The method by which the above estimated liquidating values were arrived at is indicated in the accompanying detailed table. (When no market price was available, the value was estimated as a multiple of earnings, the choice of multiplier being based on the financial record.)

THE estimated liquidating value of $96,600,000 for the parent company would be equivalent, after deducting the par value of the funded debt, to about $52 a share on the 468,348 shares of prior preferred stock. The $6 preferred is currently selling around 15 and the $7

around 18. If the bonds could be retired by tender or purchase, at say 75, this would leave a liquidating value of about 91 for the prior preferred. Moreover, these estimates are based on 1938 earnings figures, and 1939 results (not yet completely available) are much more favorable. Dividend arrears amount to about $42 on the $7 stock and $36 on the $6 issue.

Standard Gas has just announced its first step in an apparent program to dispose of isolated properties in conformity with § 11. The board has authorized Messrs. Crowley, Lynch, and Emanuel to negotiate for the sale of San Diego Consolidated Gas & Electric Company, the $46,000,000 subsidiary serving San Diego, California, and contiguous territory.

The San Diego company has had an excellent earnings record, minimum earnings of the last fifteen years being $4.73, in 1934. In 1939 about $8.92 was earned on the common stock, compared with $10.30 in 1939. Earnings figures could be adjusted to a higher level if depreciation rates were lowered (last year depreciation was 16 per cent of gross, depreciation and maintenance combined 24 per cent). If marketed to the public the stock would probably be split up. Considering the high depreciation rate and the substantial rate base (which would indicate a value for the common around $180), a public offering price of $125 (higher if the stock is split) would seem a reasonable guess. On this basis Standard Gas might realize in the neighborhood of $12,000,000.

This amount could be applied to purchase in the open market (or by tender) of Standard's five bond issues on a *pari passu* basis. They are all selling currently in the neighborhood of 67 (range this year about 48-72). At current prices about $18,000,000 bonds could probably be retired, or some 25 per cent of the outstanding amount, and if obtained below par this would, of course, improve the position of the preferred stocks.

It is reported, however, that Southern California Edison may be interested in buying San Diego, which is interconnected with one of its own properties. Disposal of the property in this manner would, of course, save underwriting costs.

Utilities Becoming "Stock-Minded"?

EXCEPT for the Indianapolis Power stock offering, utility financing in recent weeks has been at low ebb. However, various plans are now under way which may result in important refunding operations in June or July.

The success of Dillon, Read a few weeks ago with their 200,000-share distribution of Commonwealth Edison, and the marked success of Lehman Brothers' recent Indianapolis stock offering (partially due to fixing the price at 24 instead of 25) have resulted in the utilities and the Street becoming more "stock-minded." Formerly, the utilities were dubious regarding their ability to interest the public in stock offerings, but the oversubscription of the Indianapolis issue (despite the comparative obscurity of the company) indicates that the public's faith in high-grade operating company equities has not been destroyed.

Common stock distributions are, from the SEC standpoint, an ideal solution of the geographical difficulties inherent in § 11. Wall Street underwriting houses will be glad to obtain the resultant business, provided, of course, that the SEC and the utilities work harmoniously instead of disagreeing sharply over questions of policy as in the Consumers Power Case.

The April 10th offering of 160,000 shares of West Penn Power common at $27 (together with $3,500,000 first 3s due 1970) did not fare so well, due probably to the effects of the war news on utility stocks, and the further last-minute changes required by the SEC. The stock is currently quoted fractionally below the offering price. While 73,200 shares of Washington Gas Light appear on the SEC calendar, these are merely being registered to take care of future potential conversion of the 24,400 shares

of $4.50 preferred stock (the offering of which to stockholders is being underwritten). The entire common stock issue of San Diego Consolidated Gas & Electric may be offered to the public.

Section 11 Headed for the Supreme Court?

THE first two utility systems served with "show cause" orders by the SEC, in connection with their integration plans, were Electric Bond and Share and Engineers Public Service. The former has requested the commission to decide the status of American Gas and Electric, which had presented its own plan to the SEC (on which recent hearings have been held) despite the fact that it is technically an Electric Bond subsidiary.

Engineers Public Service, which operates in 15 states and Mexico, has filed a 55-page brief in which it admits that its system set-up does not square with the language of the act, but challenges the constitutionality of the "death sentence" for these reasons:

It invades the reserved powers of the states and attempts to control intrastate transactions.

It is an unlawful exercise of the power of Congress to regulate commerce.

It deprives the system of liberty and property without due process of law.

It constitutes a taking of private property without just compensation.

Its provisions are unjust, unreasonable, arbitrary, and capricious.

It fails to prescribe with requisite certainty the obligations imposed upon the companies.

It constitutes unlawful delegation of legislative power.

It constitutes an unlawful delegation of judicial power.

The commission's reaction will be interesting. It has already refused the company's request for a 90-day continuance of the date set for hearing. (See p. 562.)

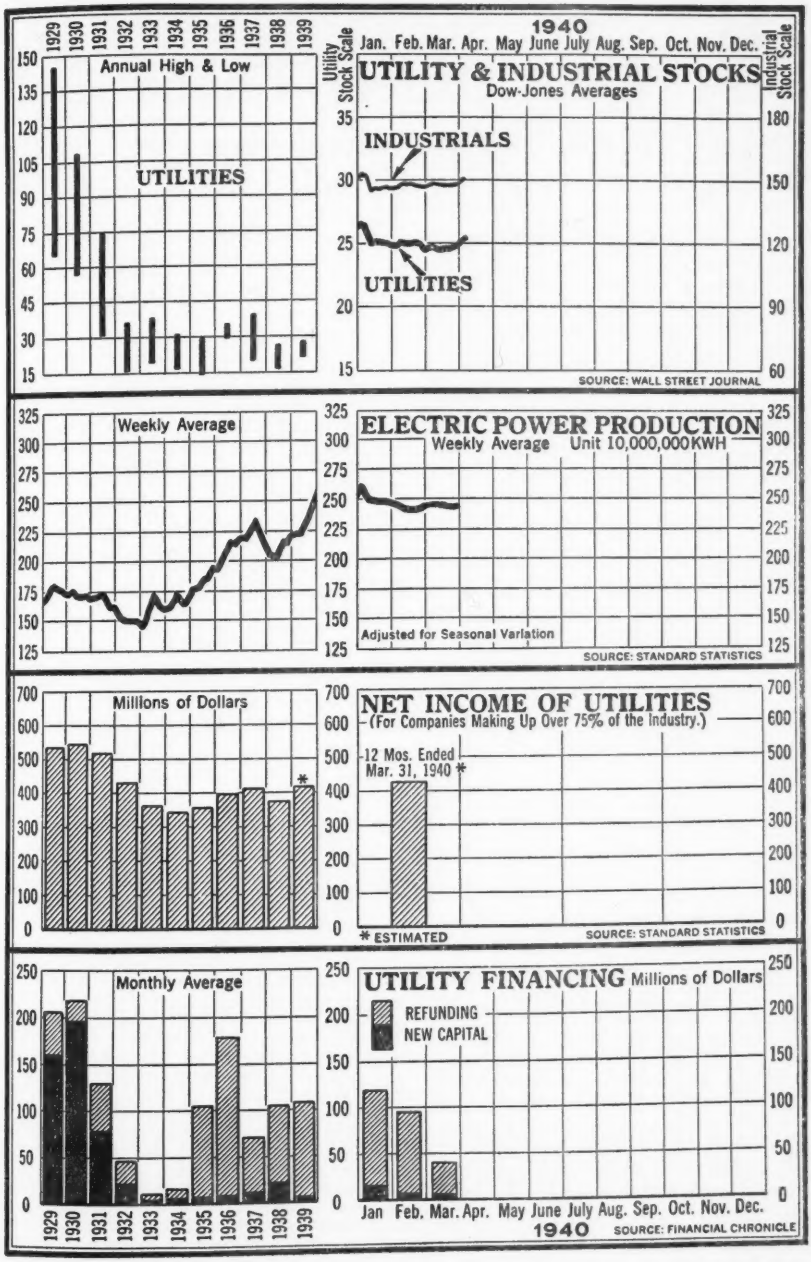
Associated Gas & Electric

AFTER a careful analysis of the problems confronting the Associated Gas system, *Standard Statistics* reaches the conclusion that the available earnings for the top holding company (after effecting the proposed merger of AG&E Company with AG&E Corporation) will be dependent largely upon the thoroughness of the reorganization proceedings. If the latter involves complete simplification and accounting readjustments as well as geographical integration, thus removing existing barriers to the free flow of income from operating companies to the top holding company, the income of the latter should be at least $9,000,000 annually.

Capitalizing this on a ten-times-earnings basis and making provision for full payment of the $6,199,770 Corporation 8s which came due March 1st, the indicated asset value would be equivalent to about $36 per bond for both Corporation and Company bonds. These bonds have recently been quoted around 14.

The Corporation bonds (over the counter) and the Company bonds (on the curb) sell at approximately the same levels. Theoretically, the Company bonds should be much inferior to the Corporation bonds so far as system equities are concerned, since they are issued against Company-held Corporation obligations which are junior to all Corporation bonds held by the public. However, the Company bonds represent the holdings of bondholders who refused to coöperate in the 1933 recapitalization, when Corporation bonds were offered in exchange, and it is thought that the SEC and the court may not penalize bondholders for not "going along" with a reorganization of undetermined legality.

ERRATUM: In the FORTNIGHTLY of February 29th, page 289, reference was made to an order of the public service commission of New York, granting an increase in rates to offset increased taxes. This was erroneously described as an increase in electric rates, whereas it referred to changes in the gas rate.


Annual High & Low
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939
150 135 120 105 90 75 60 45 30 15
UTILITIES
1940
Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
UTILITY & INDUSTRIAL STOCKS
Dow-Jones Averages
Utility Stock Scale
Industrial Stock Scale
35 30 25 20 15
180 150 120 90 60
INDUSTRIALS
UTILITIES
SOURCE: WALL STREET JOURNAL
Weekly Average
325 300 275 250 225 200 175 150 125
ELECTRIC POWER PRODUCTION
Weekly Average Unit 10,000,000 KWH
Adjusted for Seasonal Variation
SOURCE: STANDARD STATISTICS
Millions of Dollars
700 600 500 400 300 200 100 0
NET INCOME OF UTILITIES
(For Companies Making Up Over 75% of the Industry.)
12 Mos. Ended Mar. 31, 1940 *
* ESTIMATED
SOURCE: STANDARD STATISTICS
Monthly Average
250 200 150 100 50 0
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939
UTILITY FINANCING Millions of Dollars
REFUNDING
NEW CAPITAL
Jan Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
1940
SOURCE: FINANCIAL CHRONICLE

What Others Think

Technological Unemployment—A Fact or a Fallacy?

LAST month Senator O'Mahoney introduced a bill in the U. S. Senate to penalize employers who make more than average use of machinery by placing a differential tax upon them. This would reward by a corresponding reduction in tax those employers using "less than average machinery" and "making more than average" use of labor.

Accompanying his bill, Senator O'Mahoney made a statement about "the appalling fact that profits of industry are increasing but employment is not keeping pace with the increase of production." His statement cited a report on profits of 669 large corporations during 1939. These profits had increased 83.1 per cent over 1936—the inference being that, since all these industries were mechanized, it bore out his thesis that such mechanization was increasing profits without increasing opportunities for employment.

Included in the table was a reference to 12 corporations classified as "electrical equipment and radio," which showed an increase in profits of 102.5 per cent over 1938, and 103 utility companies which showed an increase of profits of 11.4 per cent in 1939. The statement made no particular reference to the telephone industry, although the recent trend toward automatic (dial) equipment instead of manual switchboard operation has been attacked from labor quarters as aggravating unemployment.

SENATOR O'Mahoney's proposal was immediately attacked by *The New York Times,* which stated editorially in part:

> It was disturbing for the President recently to speak of the task of "finding jobs faster than invention can take them away"—a statement which implied an acceptance on his part of the fallacies of the technophobes. The introduction of Senator O'Mahoney's bill proves once more that mistaken notions lead to unsound and dangerous policies. The discussion in the Senate that accompanied the introduction of the measure, moreover, revealed an apparently widespread acceptance of these mistaken notions in Congress. For the general purposes of the act were by implication endorsed by Senators Clark of Missouri, Walsh, and Wagner.

(Incidentally, the only Senator to offer serious objection to the bill at the time of its introduction was Senator Norris of Nebraska, who was certain that its effect would be "to put a tax upon human progress, and that it would act as a preventive of all technological inventions that would improve anything now in existence." Senator Norris added that "the history of civilization is simply the story of technological inventions that have been made and put to use.")

The *Times* editorial concluded:

> In all consistency Mr. O'Mahoney's bill ought to go on to penalize all labor-saving machinery whatever. To penalize merely "more-than-average" machinery and reward "less-than-average" machinery, if machinery were really the great evil, would be in principle like rewarding those who commit only less than average crimes. Why not force the Ford and General Motors companies to hammer out their cars by hand, and allow only handwritten newspapers to circulate?
>
> It ought not to be necessary at this late date, with the overwhelming evidence of history before us, to reargue the case for the machine in relation to employment. What is lost in employment at one point is offset elsewhere by reduced costs of production or new or improved products which increase demand and increase jobs. It is true that society has a duty, which has only recently been recognized, to make provision for those particular workers who are displaced by machinery in the first instance. But

if we should penalize by increased taxes the particular employers who introduce machinery, we would not only imply that the introduction of machinery is somehow antisocial; we would definitely retard technological progress.

THE controversy recalled a recent defense of technological progress as a boon to employment in the creation of the substance from which government taxes are collected by Dr. Karl T. Compton, president of the Massachusetts Institute of Technology and nationally known scientist.

Dr. Compton outlined his views on modern progress at a dinner given in Rochester, N. Y., on February 19th in honor of thirty-seven inventors and research men of the Rochester area, "whose work has enlarged employment or improved the standard of living." These thirty-seven received scrolls from the National Committee on Modern Pioneers as part of a celebration of the sesquicentennial anniversary of the establishment of the United States patent system.

Dr. Compton declared that it was disturbing to find our political leaders without a real appreciation of the part which science and invention might play "in a favorable environment" in solving the problems of unemployment and to increase earnings.

He said on this point:

> With only a few minor exceptions the policies which have been followed have been such as to discourage the development and fruition of new business enterprises based upon the invention and introduction of new products or services. Even in the message of the President of the United States to Congress, a little over a month ago, profound lack of understanding and appreciation of the rôle of technological progress was disclosed in such phrases as, "we have not yet found a way to employ the surplus of our labor which the efficiency of our industrial processes has created," or "to face the task of finding jobs faster than invention can take them away—is not defeatism."
>
> I have ventured to mention the attitude of some of our political leaders toward these matters simply because I believe that their attitude has not been for the best interests of the country, or even for the ultimate best interests of those portions of our population which have been described as "forgotten men" or to whose interest much of the recent legislation has been directed.

DR. Compton added that while it might be admitted that technological progress had sometimes created technological unemployment in specific situations, and while "undoubtedly efforts must be made to mitigate the effects of such situations," nevertheless the record showed that the efficiency of our industrial processes had not created a surplus of labor, but had created new employment, while making available to the public materials and services which would otherwise have been completely inaccessible to any except a favored few. He continued:

> On the face of this record, it is difficult to understand the President's phrase "to face the task of finding jobs faster than invention can take them away." Such statements as those made by President Roosevelt focus attention upon the least important results of technological progress and even then handle the subject in such a superficial manner as to distort the real significance of efficiency in industrial production.
>
> They ignore entirely the other and more significant aspects of technological progress which have created jobs, created employment, created profits, and incidentally created the substance from which government taxes are collected.
>
> How much more encouraging and real, and how much more promising as a program to lift our country to a higher plane of prosperity, is the thought expressed by that great benefactor of mankind, Pasteur, when he said, "In our century science is the soul of the prosperity of nations and the living source of all progress. Undoubtedly the tiring discussions of politics seem to be our guide—empty appearances. What really leads us forward is a few scientific discoveries and their application."

Dr. Compton referred to the men receiving the Modern Pioneer awards as "notable representatives of a great army of scientists, engineers, and inventors whose work has brought to this country the greater part of that prosperity which we now enjoy, and whose further work implemented by the new modern pioneers who will be added to their ranks, year by year, has the possibility of bringing still greater prosperity and happiness to our country."

A Canadian Looks at the New St. Lawrence Seaway

THE surprising changes that have occurred recently in Canadian politics with respect to the proposed St. Lawrence seaway treaty lend added interest to a recent discussion of the economic aspects of this plan by W. T. Jackman, professor of transportation at the University of Toronto. Professor Jackman's discussion was published in pamphlet form in February of this year. He is opposed to the revival of the St. Lawrence project and summarizes his reasons as follows (speaking, of course, from the standpoint of a patriotic Canadian concerned with winning the war against Germany for the Allies):

1. All our resources, human and material, are required for the prosecution of the war.
2. Ample power is available on contract and more could be had in a short time by a much smaller expenditure of capital.
3. The proposed St. Lawrence power would not be available in less than five or six years—when we expect the war will be over.
4. The supposed navigation advantages prove unsubstantial when carefully analyzed.
5. Our national direct and guaranteed debt in 1936 was $7,039,091,538, and, if increased by the cost of the present war on the same basis as the former war would be augmented by $1,700,000,000 and thereby become over $8,700,000,000. This would amount to an average debt of $800 for every man, woman, and child, or $3,200 debt for a family of four persons. Shall we add the immense millions of the St. Lawrence project?

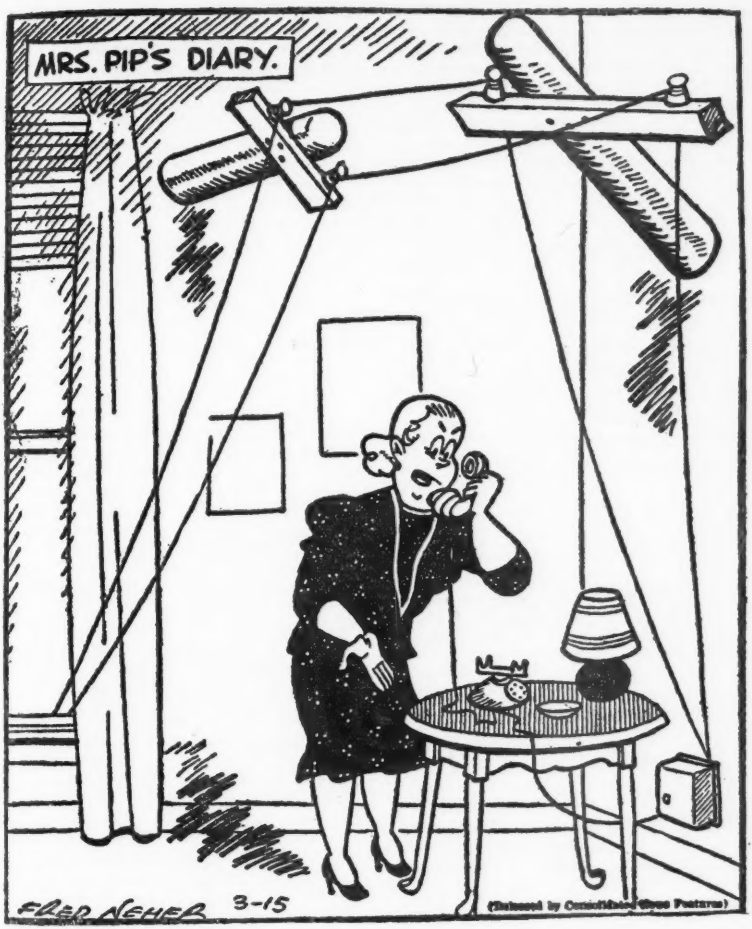
Referring to previous engineering surveys, Professor Jackman estimates that the combined development of a 27-foot navigation seaway and full installation of 5,103,100-horsepower generating facilities between Montreal and Lake Ontario would cost, if developed at the same time, $658,487,000, plus interest over a construction period of ten years of $164,621,750, making a total cost of $823,108,750. (If navigation and power features were constructed separately, the total would be over $900,000,000.) For the "international" section (extending from lower Lake Ontario to Cornwall), the combined cost of navigation and power, if constructed at the same time, would be $337,820,000, plus the cost of certain added local improvements of the Thousand Islands section.

FINALLY, he estimates that it will take $200,000,000 for improvement of the lake channels above the international section, and $130,000,000 for improvements in the Welland ship canal. At this point the author referred to the invariable habit of engineers in underestimating cost of such projects. He noted the following comparable projects:

Adding the above subtotals for sections of the St. Lawrence development, Professor Jackman gets a grand total cost of $1,340,000,000, of which Canada's share would be one-half billion or $670,000,000 plus the cost of deepening important Great Lakes harbors from the present average depth of 20 feet to 27 feet. Professor Jackman stated:

> It must be remembered that even if this upper part of the waterway were thus improved there would be no benefit to navigation, for until the section between Cornwall and Montreal were deepened to 27 feet no vessels of that draft could come into the lakes. Instead, the present bulk freighters would still have to transfer their cargoes of grain to the canallers at Prescott or Kinston for futherance to Montreal. If,

	Estimated Cost	*Actual Cost*
Manchester Ship Canal	$ 40,000,000	$ 80,000,000
Suez Canal	30,000,000	80,000,000
Panama Canal	160,000,000	375,000,000
Welland Ship Canal	50,000,000	131,000,000
Chicago Drainage Canal	16,000,000	53,000,000
National Transcontinental Railway	61,415,000	170,000,000 (1931)



Credit: Consolidated News Features

"THE PHONE WORKS FINE, BUT THE INSTALLATION DOESN'T SEEM RIGHT!"

then, this improvement above Cornwall were of no advantage for navigation, the cost of its development should have to be borne by the power interests which received all the benefit. This would mean that in order to get 1,100,000 horsepower of electric energy, the province of Ontario, which would receive all this power, should have to bear the cost of its production, that is, $670,000,000. This is the equivalent of about $610 per horsepower as the cost of production. Then, before this power could be used there would be the added cost of transmission systems. This cost, of course, is far beyond that of the privately owned power companies. But if the Dominion government were to undertake this restricted development and charge most of the cost to the taxpayers of the whole country, the amount of the cost to be borne by the Ontario power beneficiaries could be greatly reduced, but at the expense of the residents of the other provinces.

On the other hand, if the government were to construct the necessary works from the head of the lakes down to Montreal, so as to make available a 27-foot navigation as

well as the development of the power, the actual cost of the whole project, if proportionately the same as those cases noted above, would be $2,500,000,000 to $3,300,000,000. The statements made by some as to the small amount which would have to be spent to complete this project are grossly perverted, absurd, grotesque. Since the canals along this route have been made toll-free, the returns from the navigation would be insignificant. The taxpayers of the entire country would have to bear the burden of the cost and the power users of Ontario would be the main beneficiaries.

He anticipates the criticism that he has used estimates higher than those prepared by government engineers and used in drafting the proposed treaty, and that in order to arrive at such large figures he made the assumption that the cost would be increased over the estimates by a close amount. However, he checks his total figure of $1,340,000,000 against an estimate made by Brookings Institution, which concluded that the total cost of navigation and power projects combined would be $9,900,000,000. He adds that official figures do not include the very important item of interest during construction and of the expense of deepening lake and river harbors, the completion of which every substantial lake and river port in the two countries would undoubtedly press if the main project were completed.

With reference to hydroelectric power, Professor Jackman makes the following summary:

1. The Hydro-Electric Power Commission, which was exporting electric energy in 1934 to the extent of 367,953,300 kilowatt hours, increased this amount in each of the following years until in 1937 it exported 386,310,900 kilowatt hours. During the same time, of its surplus its exports increased from 193,449,610 to 439,491,214 kilowatt hours. The Canadian Niagara Power Company, during the same time, increased its export from 336,517,856 to 392,013,401 kilowatt hours. Surely, if there should be a need for additional power for industries, a substantial share of this export power could be recalled. Moreover, if power were required for industry, would it not be appropriate for the commission to cease for a time its activity in urging the use of electricity on the farms, or in industry which is not related to war work?

2. The fact that, if the navigation and power development of the international section of the St. Lawrence were undertaken, it would be at least seven to eight years before the power would be available for use, would render this source of power useless for meeting war demands. If, therefore, the war be the avowed reason for the present activity in promoting the St. Lawrence plan, we may be sure that the war would be ended before this power could be ready for use.

3. If the commission should require additional power for war industries, there are abundant supplies available almost immediately from the Province of Quebec, and this power could be obtained at rates which are most reasonable. We have only to remind ourselves of the power potentialities and the equipment of Beauharnois, the Shawinigan, the St. Maurice, and the Saguenay —not to mention other important sources— to realize that ample electric power could be provided within a few months. Does the commission realize that the Beauharnois Power Company, by a small increase of its capital investment and a reasonable deviation of the water of the river, could soon increase its power possibilities enormously? Since Great Britain and France are vigorously coöperating, cannot Ontario and Quebec do likewise?

4. If it were thought desirable by the Ontario authorities to direct their attention to the development of Ontario resources of power, an additional 500,000 horsepower could be secured at points on the upper Ottawa river (with Quebec coöperation), besides the valuable opportunity at Carillon on the lower part of this river. Then, too, the resources of the river Madawaska are yet an untapped source of potential wealth in this respect. Any or all of these Ontario sources could be brought to production in a relatively short time and with much less expenditure than the international section of the St. Lawrence. We do not hesitate to believe that the resources of this river will ultimately be employed for the fuller economic welfare of the country; but to expend many hundreds of millions upon it now when an enormously costly war is on hand would be the essence of insanity, especially when we have ample power available at comparatively small cost. The mere fact that Ontario would benefit by the prodigious expenditures of the country as a whole upon this project should not becloud the real issue in the minds of those who are thinking of national rather than provincial interests.

Professor Jackman then goes into a description of the navigation and traffic factors. He concluded:

In these days of immense national debts, of heavy taxation, and of trade disorganization, the chief wheat-importing countries have to purchase also many other commodities which are essential for their industrial and social life; and they must purchase their requirements at the times and at the prices which are most reasonable. Our wheat, immediately after threshing, is shipped to the western elevators and thence by lake navigation to eastern elevators at lake ports and St. Lawrence harbors. The British and other importers buy this wheat weeks and months ahead of the time it will be consumed as bread. To consider that, under this complicated system of marketing and handling, the farmer's return would be affected in any direct way by the proposed improvement of the St. Lawrence channel is to think in terms of the unreal. The price of the wheat is determined in the buyer's market, which is an international and highly competitive market.

Here, then, at the seat of the price-making forces, the British importer would bid a price which would give him the benefit of the lowest transportation charge for getting the wheat to Great Britain. If the proposed deepening of the St. Lawrence should perchance reduce this transportation cost by even 2 cents per bushel, the importer would offer about that much less than before for his wheat.

He added that even if there should be a margin of this reduced cost which did not go to the importer, there are well-organized interests between the farmers and the importers which would share the remainder. In other words, it would be a purely mythical conception to suppose that, even if there were lower carrying costs from the proposed St. Lawrence development, any substantial part of this would get back to the farmers, even though the farmers would have to pay their share of the construction, maintenance, and operating costs.

Is the Public Utility Concept Obsolete?

Although admitting that the theory of public utility regulation is being steadily hastened as a device of government control over more industries, Dr. Horace M. Gray, associate professor of economics of the University of Illinois, writing in the February issue of *The Journal of Land & Public Utility Economics,* thinks that the public utility concept is "passing," or at any rate is doomed to eventual abandonment.

Dr. Gray referred to the growth of this public utility concept in the nineteenth century when railroads, gas, and other utility forms were being allowed monopolistic privileges, which were subsequently exercised in such a way that a policing system, known as public utility regulation, had to be set up to protect the public from utility abuse. But these regulatory laws, in the opinion of Dr. Gray, have not proven to be effective. He stated:

> Whatever relative weight may be assigned to these conflicting objectives in pre-war legislation, it seems clear that protection of consumers faded into the background during subsequent years. In the war period emphasis shifted to the problems of providing adequate service facilities, obtaining much needed capital, and adjusting rates upward to cover rising costs. After the war the utility industries entered upon a boom period during which rapid expansion was the guiding principle of both private and public policy. Private financiers and promoters were concerned with new construction, finance, consolidation, elimination of residual competition, organization of great economic empires, and speculative profits. Public regulation, in so far as the interests of consumers were concerned, practically ceased to function; the policies of commissions and courts, particularly the latter, were calculated to promote the expansionist and profit-seeking activities of private enterprise. When, after 1929, the drastic curtailment of consumer purchasing power gave rise to a widespread agitation for reduction of utility rates, commissions and courts came to the rescue of the hard-pressed utilities and prevented, or minimized, rate reduction by invoking a tortured construction of the "fair return on fair value" doctrine. In extreme cases, as in railroads, rates were actually raised at a time when by every criterion of economic teaching they should have been lowered. It thus became increasingly apparent that "protection of consumers" had been superseded in large measure by "protection of property." Recently an even more menacing and antisocial use of the public utility concept has developed. In order to preserve obsolete economic organ-

ization, it is now proposed to invoke this concept to prevent the establishment of alternative institutions designed to serve needs not adequately provided for under existing arrangements. A number of examples may be cited to illustrate this latest stage of "institutional decadence."

DR. Gray then referred to the attempt of the railroads to suppress competition from motor carriers by having the latter included within the restrictive confines of the public utility status. He referred to attempts by the electric utility companies "to secure inclusion within the public utility category of municipal electric systems" so that the latter could be forced to conform to the same standards of government regulation which govern private operation.

Attacks from the same quarter against TVA and other larger public power agencies were also noted. He referred to the radio industry, "desirous of monopolizing the air but fearful that its temporary licenses may be revoked or that public broadcasting may be established." And then "milk monopolists," "air transport companies," and the "chronically chaotic bituminous coal industry," and finally the unhappy experiment of the NRA.

Dr. Gray feels that the public utility concept is obsolescent because the technique of its regulation is negative and restrictive — regulatory laws prohibit certain forms of monopolistic behavior but "fail to impose definite responsibility for socially desirable action." He observed that utility companies are under no legal compulsion to conserve natural resources, operate efficiently, extend service to nonprofitable areas, and so forth, and added that they were unlikely to do so except in cases where such a course would coincide with industrial profit.

Under the prevailing system of monopoly capitalism, private enterprise, according to Dr. Gray, "seems to have lost, in large measure, its power to plan constructively for progressive improvement of the economy." In the utility field, water resources, electric power, natural gas, communication, and transportation, were said to be subject to this "fatal weakness." Dr. Gray concluded:

> The fact, however, that the public utility concept is tending to be superseded should serve as a warning to those who propose to extend its application. Why should an obsolete institution, one that is a demonstrated failure, be extended to embrace additional economic activities? What reason is there to suppose that a system of public control which has proved ineffective in the case of transportation, power, and communications will prove successful in the case of oil, coal, milk, housing, and other forms of enterprise? Why, at the very time when it is being superseded in those areas where it has been operative for many years, should it be extended to new fields where the problems are quite different and the complications more numerous? If additional sectors of our economy need to be brought within the orbit of public control, would it not be more realistic to fashion new institutions for this purpose rather than to rely on a model that has outlived its usefulness?
>
> The view that the public utility concept is tending toward obsolescence and supersession should not, as one critic feels, be construed as pessimistic or as indicating the inevitability of public ownership. All institutions are subject to the same evolutionary process in a dynamic society. They arise in response to definite social needs, serve for a time the purposes for which they were created, eventually become impotent or actually detrimental, and are gradually displaced by new institutions designed to meet new needs. The observation and analysis of this process in the economic field are proper functions of the economist and should be the objects of scientific inquiry devoid of emotional predilections. One may experience a certain nostalgia for familiar institutions and apprehension concerning new ones, but this is an emotional reaction, not a scientific judgment. The passing of an obsolete institution, although it may be noted with regret, is on the whole a proper basis for optimism, because it clears the way for the development of new institutions that are better adapted to contemporary needs. The exact nature of these new institutions is neither predictable nor inevitable. Their form will be determined by the interplay of numerous forces, many of which cannot be clearly foreseen or evaluated. Hence, in the present instance, there is no reason to suppose that the public utility concept will be displaced exclusively by public ownership. If the spirit of "institutional inventiveness" is given a free rein, many new types of control, not heretofore contemplated, may be developed. These may differ both from public utility regulation and from present forms of public owner-

ship. The latter is merely one of several possible alternatives and is by no means inevitable.

UNFORTUNATELY, Dr. Gray did not indicate, aside from his reference to public ownership, just what could be done to remedy the defects he charges against public utilities. For example, if the telephone business in a given community is not protected as an "inherent monopoly" by regulatory legislation, is it not possible that we might find ourselves going back to the day of competitive nuisance in such business when it was necessary for the average business man to have two telephones on his desk, and so forth?

The fact that American standards of gas, electric, and telephone service (and their availability to the public) are unsurpassed by any major foreign power in which those services are developed as public enterprises, would seem to warrant further explanation on the score of the failure of the public utility concept to do anything for the public.

Notes on Recent Publications

ARE NEWSPAPERS PUBLIC UTILITIES? By Benjamin P. Alschuler. 5 *John Marshall Law Quarterly* 270. December, 1939.

BIG BUSINESS AND RADIO. By Gleason L. Archer. The American Historical Company, Inc. New York. 1939. 503 pages. Price $4.

IS FAIR RETURN APPROPRIATE FOR MUNICIPAL UTILITIES? By Roderick H. Riley. *The Journal of Land & Public Utility Economics.* February, 1940.

Reviewing recent court and commission decisions, this author, who is connected with the industrial economics division of the U. S. Department of Commerce, concludes that even proponents of municipal ownership of utilities commonly misunderstand the nature of public economics and insist upon applying private business standards without regard to their appropriateness. The article constitutes a sympathetic discussion of the claim of municipalities that publicly owned utilities should be exempt from independent regulation.

LEGAL POSSIBILITIES AND LIMITATIONS OF MILK DISTRIBUTION AS A PUBLIC UTILITY. Part II. By W. P. Mortensen. *The Journal of Land & Public Utility Economics.* February, 1940.

REPORT OF PUBLIC SERVICE COMMISSION OF KENTUCKY, 1938 and 1939. Frankfort, Ky. January 15, 1940.

Although this is a routine report of a state commission to the legislature—of only thirty pages—it is well organized within its limitations and concludes with this very remarkable sentence: "The commission feels that the present Public Service Commission Act and its amendments are adequate for proper regulation and that at present it has adequate funds available for its work." Such modesty surely deserves wider recognition.

RIGHTS OF PRIORITY IN CORPORATE REORGANIZATION. By Moultrie Hitt. Memorandum privately circulated, Washington, D. C. February 15, 1940.

The author, a Washington attorney, in this 31-page pamphlet has an interesting legal as well as economic analysis of the rights of junior security holders in reorganization provisions, particularly under the Holding Company Act. He concludes:

"Apparently, there is a present tendency for administrative bodies with a reorganization problem to amputate the limbs of junior equity interests, but the wide variety of circumstances, and the usual innocence of the investors in common stocks, would seem to call for as considrate treatment as practicable for junior creditors and stockholders, conformable with the spirit of equity, and consonant with the concept that the provisions of the Bankruptcy Act for corporate reorganization were intended for the relief of debtors.

"In other words, there does not appear to be any very strong reasons why it would be injurious to the general public interest to afford junior interests some reasonable opportunity to recoup if the enterprise eventually succeeds, provided precautions are taken to protect the interests of those with prior rights from unfair dilution."

WATER RATES AND SERVICE CHARGES, 1940. Part I and Part II. *The American City.* January and February, 1940, issues, respectively.

These two instalments cover domestic and industrial meter rates in typical American cities operating their own water distribution systems. They include discounts and penalties, installation charges, fire hydrant rentals, and fire sprinkler costs.

The March of Events

Municipalities Seek to Join Integration Proceedings

POSSIBILITY that the "death sentence" integration program of the Securities and Exchange Commission may take an unexpected turn in the direction of sales of unrelated properties to municipalities, particularly in areas served by huge Federal hydroelectric projects, was seen recently when the city of Las Animas, Colo., sought to intervene in the Engineers Public Service proceeding.

The SEC denied an application by Engineers Public Service for a 90-day delay in the hearing set for April 26th in the § 11 ("death sentence") proceeding that the commission has instituted against that company. The company has answered the commission's notice to show cause why it should not be integrated geographically and simplified corporately in accordance with § 11 of the Holding Company Act by challenging the constitutionality of the dismemberment of holding company systems.

The application for intervention in the proceeding from Las Animas, it was understood, was one of several applications by municipalities to intervene in such proceedings. The city stated it was interested in the proceeding because it desires to acquire the local electrical distributing system of the Western Public Service Company, a subsidiary of Engineers Public Service.

Chamber Discusses Resources

RELATIONSHIPS between business and government and between the Federal government and the states will come before the twenty-eighth annual meeting of the Chamber of Commerce of the United States, to be held in Washington April 29th to May 2nd. A statement by the Chamber of Commerce on April 11th said:

"Natural resources industries take great pride in the conservation they have accomplished through invention, through technical development, and through coöperative self-regulation. Yet, the questions persist—What about our coal, our oil, our forests and minerals, and our land and water resources? Are these being wasted? What is 'waste'? How are the facts to be determined; and by whom are any needed remedies to be prescribed and made effective?

"In no field of business endeavor is there greater need for clarification of the relationships between government and business and between the Federal government and the states than in the natural resource field. These relationships will be developed and discussed by a special Natural Resources Round Table."

Buys Elephant Butte Power

THE first contract for sale of hydroelectric power from the Elephant Butte dam in southern New Mexico was signed in Denver, Colo., on March 28th in behalf of the government by S. O. Harper, assistant chief engineer of the Bureau of Reclamation, with the El Paso Electric Company. R. S. Nelson, president of the power company, was in Denver on a visit described as "routine," as contract provisions had been agreed to more than a week previous.

FPC Halts Gas Inquiry

THE Federal Power Commission's inquiry into the finances and operations of the Hope Natural Gas Company, which supplies nearly three-quarters of the fuel distributed by its sister corporation, the East Ohio Gas Company, in Cleveland, Akron, and 60 other northern Ohio cities, was brought to a halt on April 3rd at Clarksburg, W. Va.

After a long conference among attorneys involved in the nationally significant rate case, June 3rd was set as the date for resumption of the inquiry by Edward B. Marsh, FPC examiner, conducting the hearings on complaints by Cleveland and Akron that Hope's charges to East Ohio are excessive.

William B. Cockley, Cleveland attorney, who is chief counsel for Hope, argued that a continuance was justified because Hope accountants, geologists, and engineers had long been working overtime, to the possible detriment of the company's everyday operations, in rushing the preparation of exhibits for the Federal investigation.

Japanese Industry Hurt

JAPAN'S important cotton-spinning industry, centered in the Osaka-Kobe region, has been handicapped seriously as a result of the prevailing national power shortage. The mills have been forced to accept a 45 per cent reduction of their normal electric current requirements, a situation which the Cotton

Spinners' Association maintains will eventually endanger Japan's cotton textile export trade. The government has proposed a plan which provides that about 100 of the 210 mills belonging to members of the Cotton Spinners' Association be designated as export mills and only permitted to produce goods for foreign trade. Such concerns would receive special consideration in allotments of electric power and other necessary materials.

Alabama

Gas Rates Reduced

THE state public service commission recently authorized a general reduction in rates of the Birmingham Gas Company, effective May 1st.

The first 2,000 cubic feet a month will cost 85 cents per thousand feet, while the next 3,000 cubic feet will be 80 cents per thousand, with next 5,000 cubic feet of gas costing 75 cents; next 5,000 at 65 cents; all over 15,000 cubic feet of gas will cost 45 cents per thousand.

The objective rate, where customers consume more than their established base use, will be 75 cents for the first 500 cubic feet or less a month; 65 cents per thousand cubic feet for the next 4,500 cubic feet a month or less; 45 cents per thousand for next 30,000 cubic feet; all over 35,000 feet will be 30 cents per thousand cubic feet.

The commission estimated customers would save $59,500 annually.

Electric Rate Slash Probable

THE annual report of the Alabama Power Company mailed to stockholders April 1st recited the possibility of further electric rate reductions when it becomes possible for the company to refinance its bonds and preferred stock, at lower cost, if additional taxes are not levied to offset the savings.

Thomas W. Martin, president of the company, stated in the report that "it is obvious the company cannot on one hand pay higher taxes year after year, and on the other hand continually reduce its rates for electric service. In the face of increasing taxes, the rates of the company for domestic, commercial, and rural service were reduced $9,416,514 under orders of the state public service commission for the 10-year period ending with 1939." Taxes for the year 1939, covered by the report, totaled $3,604,702 (an increase of 15 per cent over 1938) and were the largest in the company's history.

Arkansas

Asks New Trial

A MOTION for a new trial of a state utilities commission order authorizing competitive distribution of gas in southwest Arkansas, which was set aside in second division circuit court March 23rd, was overruled early this month by Judge Auten. He granted an appeal to the state supreme court.

The commission order empowering the Louisiana-Nevada Transit Company of Ada, Okla., to distribute natural gas in southwest Arkansas in competition with the Arkansas Louisiana Gas Company had been vacated by Judge Auten on petition of the Arkansas Louisiana Company.

The motion was filed jointly by the state commission, the Louisiana-Nevada Company, and the city of Hope, and the Hope Brick Works, customers of the new company. The customers intervened in the review as party respondents with the commission and the new pipe-line company. The motion charged, among other things, that Judge Auten's decision attempted to prevent transportation and sale of gas in interstate commerce.

Connecticut

Lower Rates for Housing Projects

THE possibility of reduced utility rates for housing projects in various cities of the state was discussed recently at a conference in the office of the state public utilities commission at Hartford, attended by housing officials and representatives of gas and electric companies.

The question of a downward readjustment of electric rates for housing units was brought to the attention of the PUC by William D. McCue, executive director of the New Britain Housing Authority. Mr. McCue asserted that

rates should be reduced because service through a central point would result in lower cost to the companies.

At the conclusion of the discussion the commission asked the technical advisers of the interested housing authorities to furnish to the utility companies concerned information as to the proposed project size and the estimated cost of utility service. After the companies have had a chance to study these data, hearings may be held regarding the possibility of devising rates for housing project classifications.

Among those attending the conference, besides Mr. McCue, were Sylvester C. Shaughnessy, executive director of the project in Norwalk; Thomas Yardley, Jr., Stamford executive director; Warren Morgens, representing the United States Housing Authority; Frederick W. Westman, USHA project adviser; B. H. McElhone, New Britain manager for the Connecticut Light & Power Company.

Illinois

Supreme Court Denies Gas Rate Appeal

THE U. S. Supreme Court on April 1st dismissed "for the want of a substantial Federal question" an appeal from a decision holding valid an Illinois Commerce Commission order refusing to permit an increase in Chicago's gas rates. The Peoples Gas Light & Coke Company, appealing from the state supreme court, contended rates under the commission's order operated to confiscate the utility's property to the extent of $7,000 daily.

In April, 1934, an Illinois statute placed a tax of 3 per cent on the gross revenue of utility companies operating in the state. In July, 1935, the gas company applied to the state commerce commission for a rate increase approximately equivalent to the gross revenue tax, on the grounds that continuance of the old rate confiscated its property. The commission denied the increase.

On appeal, the circuit court for Cook county found the old rates to be confiscatory and enjoined their continued enforcement, but the state supreme court subsequently overruled the circuit court and affirmed the position of the state commission.

Chairman of the Peoples Gas Light & Coke Company George A. Ranney, following the brief announcement of the Supreme Court, said the management had sincerely believed "and continues to believe that the gas rates fixed by the Illinois Commerce Commission are insufficient and contrary to the best interests of the company's security holders and employees and detrimental to its service to the public. Until such time as the duly constituted authorities find that the lower rates are insufficient, the company's revenues will remain inadequate."

He said the decision of the Supreme Court came as "a surprise and disappointment."

William W. Hart, chairman of the state commission, and Harry R. Booth, commission counsel, announced they were gratified that the commission's denial had been validated.

Massachusetts

Rate Probe Ordered

AN investigation to determine whether the rates of the Boston Edison Company should be reduced was ordered on March 29th by the state department of public utilities on motion of Commissioner Richard D. Grant.

The action of the department was unanimous and Chairman Joseph R. Cotton said the date for beginning the investigation would be announced later.

Declaring that the revenues of the company from residence and business office rate schedules have shown an increase of $2,300,000 in three years, Commissioner Grant said:

"After giving consideration to the facts it seemed to me some effort should be made to reduce the rate charged by the company. I therefore presented them to the commission, together with my motion for an investigation and my motion was unanimously adopted."

Mississippi

Senate Passes Tax Bill

DR. James C. Rice of Natchez on March 29th obtained state senate passage of a measure to place a 10 per cent gross privilege tax on corporations selling gas, water, and electricity. The vote was 33-10. To circumvent a possible attempt to kill it on motion to

reconsider, Dr. Rice got unanimous consent to send it to the house at once.

It was the first bill killed by committee to be revived by the full membership in this session. Dr. Rice estimated such a tax would give the state $500,000 a year. He said the utilities charge "exorbitant rates. This is a proposed tax on high profits."

Missouri

Revocable Permit Issued

A REVOCABLE permit for use of the streets by street cars was issued to the Public Service Company by the St. Louis Board of Public Service on April 2nd, as a substitute for the franchise system always employed heretofore. While the company, reorganized last November, has not finally conceded the voiding of its old franchise rights, the city was hopeful that the request for the permit marked the end of the long standing controversy.

Under the permit, which, unlike a franchise having a stated life, may be revoked by the board at any time, the street car operation will be on a basis comparable to the bus lines.

A license tax of 2.9 per cent of gross rail revenue is provided in the permit, which required the company to pay at that rate, by April 12th, for the period elapsed since March 18, 1939. The city contends the company's franchise rights expired on that date. Early this year the company completed payment of franchise charges up to that date.

The permit also requires payment of an additional $68,400.82, to equalize the license tax under its bus operation permit from the same date in 1939, in keeping with the recent increase of that tax rate from 3 to 5 per cent of gross revenue.

It has been estimated that the 2.9 per cent levy on street car business would yield the city $228,000 a year, or about the same amount paid heretofore in lump franchise taxes. The company will continue to pay the mill tax on trolley passengers, estimated at $89,000 this year.

Power Franchise Granted

BY a vote of 14 to 1 citizens of Tipton recently granted the Missouri Utilities Company a franchise to furnish electrical current for ten years, with a 10-year renewal option. There were 347 votes cast for the franchise and 25 against.

The Missouri Utilities Company serves 18 cities throughout central Missouri.

New York

Legislative Bills

GOVERNOR Lehman on March 31st vetoed the bill abolishing the state transit commission, but signed the alternative measure placing the expenditures of the commission under the control of the New York City Board of Estimate.

The commission, a state agency with which Mayor LaGuardia of New York city has had many battles, had the right to make its own budget and requisition the city for payment. Several times it had to go into court to mandamus the payment of checks held up by the mayor.

The governor's veto of the bill abolishing the commission was consistent with the stand he took earlier in the legislative session when he disapproved another bill along these lines on the grounds that, since abolition of the commission meant transfer of a number of its duties to the state public service commission, it would saddle another $500,000 of expense on the state.

When the legislative session came to an end on March 31st it was discovered that the anti-wire tapping and search and seizure legislation which had been introduced with the approval of Thomas E. Dewey had gone into the discard. The senate on March 26th passed the Coudert bill, which was part of the Dewey program, and the Mahoney bill, which was not. These bills went to the assembly and were kept in the rules committee. The lower house passed two bills presented by MacNeil Mitchell, also part of the program to which Mr. Dewey had given his assent.

On March 30th the assembly bills went to the senate for concurrence and were referred to the codes committee, of which Senator Mahoney is chairman. They did not emerge from committee, according to the senate records, and the session thus came to an end without any completed legislative action on the subject.

Without opposition the assembly on March 26th passed the Mitchell bill putting electric submetering corporations under the state public service commission and limiting the maximum rate charged by such corporations to that fixed in the schedule of an electric utility operating in the same territory under similar conditions. For years Governor Lehman has urged in vain the enactment of such a bill.

The assembly also passed the Goldstein bill making it a misdemeanor to broadcast over the radio untrue or misleading advertisements. It also requires the advertiser to file with the radio station his name and the name under which the particular business is conducted.

The state assembly on March 26th reversed its rules committee and defeated the Ehrlich bill which would abolish the state power authority.

Oklahoma

Governor Helpless

A 3-JUDGE Federal court late last month overruled a state motion to deny the Federal government's application for a temporary injunction restraining Governor Phillips from interfering with the Grand river dam. The court then announced it would meet in Tulsa May 6th at which time an order will be issued on the government's application for the injunction. The temporary injunction is to remain in effect until that date.

Judge Robert L. Williams pointed out that rules require the court to make a finding of fact and conclusion of law at the same time it issues a temporary injunction. He said it would be necessary for the court to wait until May 6th so that a transcript of the record could be made available for the Federal court.

Oregon

PUD Vote Set for Fall

CLACKAMAS county will not vote until the November general elections on the formation of the proposed county people's utility district, H. M. DuBois, chairman of the Pomona Grange's PUD committee, announced recently.

Because of an error in descriptions, petitions seeking to have the state hydroelectric commission place the proposal on the primary ballot were not filed in Salem on March 27th, as previously planned, he said. Instead, petitions will be recirculated in preparation for the general elections, DuBois declared, thus to insure their correctness and to forestall any possible litigation.

DuBois said he took the 55 petitions containing 938 signatures—some 200 more than are assertedly required—to Salem on March 27th with intent to file them, but a check by the state engineer, he added, revealed a defect in the wording of description on those circulated in municipalities. Those circulated in rural areas were found to be satisfactory, he said.

A further check with the attorney general's office, DuBois said, indicated the error was such that it might be followed by litigation.

Rate Reduction Revealed

RATE reductions aggregating $180,600 annually by the Mountain States Power Company were announced recently at Salem by State Public Utilities Commissioner Ormond R. Bean. The reductions affect the Willamette valley, Coos Bay, and Tillamook areas.

These reductions followed a $105,000 rate slash in 1938 and one in 1939. Total annual reductions to Mountain States Power Company customers since January 1, 1938, exceed $365,500. Both residential and commercial rates are involved in the latest reductions.

Pennsylvania

Proposed Contract Approved

THE city council's lighting committee early this month approved a proposed 5-year contract for purchase of coke-oven gas by the Philadelphia Gas Works Company for 25 cents per thousand cubic feet. If the council itself approves, the measure would continue the temporary rate being paid to the Philadelphia Coke Company by the gas company, which operates the city-owned gas plant. Rates in past years varied from 31 to 35 cents.

The proposed rate was ratified recently by the Municipal Gas Commission, headed by Councilman George Maxman. The contract would protect the consumer against possible failure of normal sources of gas, and prevent dismissal of several hundred employees.

The committee also approved a resolution, which was sent to Mayor Lamberton for action, calling upon the gas company to transfer to the city title to real estate assessed at $1,576,000 belonging to the city but held in the company's name.

Rehearing Sought

THE city of Pittsburgh, by resolution of council, on April 4th joined the Pennsylvania Public Ownership League in a request for rehearing and amendment of an order made by the state public utility commission on March 19th on the Duquesne Light Company, according to a statement issued at Harrisburg.

Instead of a voluntary rate reduction of $1,724,000 by Duquesne Light Company, as accepted by the commission in its order, the Public Ownership League and the municipality of Pittsburgh claim a further rate reduction of $4,245,846, as well as refunds amounting to $15,300,497, which, it is contended, represents excess revenues collected from the consumers.

Susquehanna "TVA" Urged

FLOODS in central Pennsylvania brought suggestions recently from President Roosevelt and a House member that the Susquehanna valley be made into another TVA.

Hundreds of millions of dollars have been spent by the Federal government in the Tennessee valley in development work including the building of great dams for generation of hydroelectric power, and with flood control as a by-product.

President Roosevelt, who has repeatedly emphasized the TVA as a New Deal accomplishment, said in a press conference that the same treatment should be applied to the Susquehanna valley. He spoke of flood prevention savings in the Tennessee region, but declined to criticize the Republican administration of Pennsylvania because of alleged lack of coöperation with Federal flood-control efforts.

Representative Rankin (D., Miss.), long an advocate of "public power" and the TVA enterprise, advocated the same system in a region where anthracite coal is the important fuel and is used in private plants for production of electricity.

South Carolina

Santee Quiz Set

THE state senate judiciary committee on April 3rd began its inquiry into the charges against the administration of the Santee-Cooper power project made by Captain J. L. M. Irby, the dismissed director of the project's land-acquisition department. Irby testified in great detail, listing a long series of transactions and incidents which he said substantiated his charges. Governor Maybank also testified.

Santee-Cooper was fully represented for the hearing. All members of the board of directors of the South Carolina Public Service Authority arrived in Columbia for the hearing, as well as a large delegation of officials of the project from Charleston.

The judiciary committee was under instructions from the senate to determine whether the charges which have been made warrant a full legislative investigation of the project by a special investigating committee from the general assembly.

Tennessee

New Gas Firm

THE recently organized Tennessee Gas & Transportation Corporation has announced plans to supply natural gas to Nashville, Knoxville, Chattanooga, and other east and middle Tennessee towns.

Officials of the Nashville company withheld comment on the plans, although officials of another company involved in negotiations of Tennessee Gas & Transportation Corporation expressed the belief that "satisfactory" arrangements would be made through the UGI (United Gas Improvement Company) of Philadelphia, for use of the local distribution system. The Nashville Gas & Heating Company has no natural gas franchise in Nashville. The Tennessee Gas, Oil & Pipe Line Company (formerly the Dickson County Gas & Oil Company) has a natural gas franchise in Nashville, but no distribution system, it was said.

Hearing of an application by the Chattanooga Gas Company for a rate schedule for distribution in Chattanooga of natural gas was adjourned on April 3rd by the state commission until May 1st when testimony will be heard from an intervening petitioner. The Chattanooga Company is seeking a rate schedule on gas to be obtained from the Southern Gas Company by pipe from Calhoun, Ga., and supplying Chattanooga and a 7-mile area.

Tennessee Gas & Transportation Corporation and the Nashville Natural Gas Company are intervening petitioners. The TG&T contends the Chattanooga Gas Company's plan would not be adequate for that city. President C. van den Berg, Jr., of the Chattanooga Company, denied the service would be inadequate, and charged that the contesting companies

were seeking to delay the hearing to further what he called "a promotion plan."

REA Assessment

REPRESENTATIVES of the Rural Electrification Administration and a committee representing Tennessee electric coöperatives who held a conference with members of the state railroad and public utilities commission recently were advised that the commission would follow the method of assessment as laid down by the last legislature, and that organizations with small earnings would be given just treatment in the matter of assessment.

Under the act of the last legislature, the old coöperative act was repealed and a new act set up methods for making assessments vested in the state commission. The delegation was instructed in the method of filling out the blanks and making returns, and other details were discussed during the conference.

May Lift Surcharge

THE 15 per cent surcharge Memphis users of electricity pay over the basic TVA rates may be removed June 27th, the first anniversary of public power ownership in the city.

No final decision had been reached, Wilson Mallory, president of the Light, Gas and Water Commission, said recently, but he indicated a surplus balance of $1,187,694 was a factor strongly in favor of abandoning the surcharge.

Mallory asserted that the "board feels now that it should have the results of a full year's operation before reaching a definite decision regarding the removal of the surcharge."

Texas

Gas Reports Required

ANNUAL reports may be required of gas producers who sell to utility distributing companies in order that the state commission may effectuate its rate-making powers, according to a recent ruling of the state attorney general.

Specifically, the attorney general held that the commission has jurisdiction to require the Texoma Natural Gas Company to file an annual report. The company is a utility, it was held, in that it distributes gas from its gathering lines to drilling contractors, private dwellings, and a warehouse.

In determining reasonableness of the prices to be paid by a utility, it was held, the commission necessarily must inquire into records of the producers.

NLRB Favors AFL Union

THE National Labor Relations Board early this month announced a decision directing West Texas Utilities Company, San Angelo, to cease dominating and interfering with the Utilities Workers Protective Association; to refuse recognition of the association as a collective bargaining agency of its employees; and to offer reinstatement with back pay to W. H. Wills, Volney R. Quinlan, and R. S. Elder, all found discriminatorily discharged.

The board further directed the company to cease discouraging membership in the International Brotherhood of Electrical Workers (AFL), or in any other manner interfering with, restraining, or coercing its employees in the exercise of their right of self-organization.

Washington

Approves Bonneville Tie-in

AN intertie of Seattle's hydroelectric system with the vast resources of the Federal government's Bonneville dam set-up was decided on definitely by city officials on March 27th, and the city council initiated the drawing of ordinances embodying a 10-year contract with Bonneville.

Chairman David Levine of the council utilities committee made terms of the contract known after a conference of his committee. Mayor Langlie early this month signed the contract.

West Virginia

Gas Rules Revised

THE state public service commission on March 30th announced the first general revision of rules and regulations for gas utilities since 1927, and declared it should bring about a betterment of service for consumers and some monetary saving.

The new regulations became effective April 1st. One of the major changes was a new limit for the allowable variation of gas pressure in a distribution system, which, commission attachés said, not only should prove a better safety measure but also should bring about a more constant heat in gas burners.

The new regulations permit a maximum pressure of 8½ ounces a square inch and a minimum of not less than half the maximum. The old rules allowed an 8½-ounce variation in pressure.

Another regulation sets 150 feet as the distance a gas main must be extended free of charge by the company to provide service for new consumers. The old distance was 50 feet. The company also is limited to charging 12 per cent of the cost of the extension beyond 150 feet. This is billed to the customer as a 1 per cent a month surcharge over the year's period.

The commission also provided that henceforth large capacity meters must be tested on a registered basis (the amount of gas passed through) rather than every five years, as in the past. This regulation applies mainly to high-pressure meters, according to the commission's announcement.

Wisconsin

Rate Reductions Announced

COMMERCIAL lighting and small power customers of the Wisconsin Power & Light Company will benefit by a rate reduction announced late last month by the company.

It was estimated that the new rate schedule, which had the approval of the state public service commission, would effect a saving of approximately $70,000 annually to commercial customers. The schedule was effective for service rendered on and after first meter readings taken after March 31st.

Residential and commercial electric customers and rural gas customers of Madison Gas & Electric Company will receive a $25,919 yearly reduction starting with bills rendered May 1st, the state commission disclosed on March 31st. Neither the commission nor the company could give an estimate on the number of residences or firms that would be affected.

Among the State Commissions

JOHN G. Kaiser, of Ripon, on April 1st assumed his position as secretary of the Wisconsin Public Service Commission. Kaiser, former chief clerk of the Wisconsin Power & Light Company, was named commission secretary on March 30th to replace Calmer Browy, who was acting secretary. Browy remained with the commission as junior investigator.

New public service commission organization details recently announced showed the 144 staff members grouped in five departments—administration, legal, engineering, accounts and finance, and rates and engineering. The commission said the staff was the smallest it has been since 1932. It has broad regulatory powers in utility, railroad, water power, and motor transportation fields.

John J. Greenleaf of Richmond, former special assistant to the U. S. Attorney General, was appointed a member of the Kentucky Public Service Commission on April 10th by Governor Johnson. The appointment had been expected for some time. The governor emphasized that Greenleaf, in filling out the unexpired term of the late J. C. W. Beckham, would serve as an associate commission member, not as chairman, which position Beckham held.

On March 17, 1940, at Moline, Andrew Olson, a member of the Illinois Commerce Commission, died. He had served on the commission for seven years.

Chairman Perry McCart, of the Indiana Public Service Commission, recently was reappointed for a new 4-year term beginning March 2, 1940. He was first appointed to the commission in January, 1933.

Robert E. Holliway, secretary of the Missouri Public Service Commission, has taken leave of absence in order to pursue his campaign for the Democratic nomination for state auditor. The Democratic primary will be held August 6th. Edgar A. Eagan, who had been serving as executive secretary to Governor Stark, was appointed Holliway's successor.

Andrew F. Schoeppel was recently reappointed to the Kansas State Corporation Commission for a 4-year term ending March 20, 1944. He was originally appointed in February, 1939, for the unexpired term of Homer Hoch, who resigned. At a commission reorganization meeting held last month, Mr. Schoeppel was reëlected as its chairman.

George H. Wilson, chief accountant of the District of Columbia Public Utilities Commission, died March 21st.

The Latest Utility Rulings

Bond Issue for Treasury Reimbursement and Property Additions Exempted by SEC

An application by Michigan Consolidated Gas Company for the exemption of the issue and private sale of $2,000,000 principal amount of first mortgage bonds was approved by the Securities and Exchange Commission, subject to certain conditions. The proceeds were to be used in part to replenish the company's treasury for cash expenditures for extensions and improvements and in part for expenditures to be made for similar purposes during the present calendar year.

The commission found the price of 101¼ for the bonds not to be unreasonable although no competitive bids had been asked. There was some evidence that the applicant's agent had fairly protracted negotiations with the purchasers, and there was no reason to believe that either of the proposed purchasers was affiliated with the applicant. The outstanding bonds of the same series are listed on the New York Stock Exchange, and the range for 1940 had been between 101¼ and 104½. The range for the week of March 4 to March 9, 1940, was between 103¾ and 104½. At the time negotiations were had with the purchasers the market price was 102½.

Issuance of additional bonds, it was pointed out, would to some extent nullify advantages accruing to the company's credit and capitalization ratios as anticipated in a 1938 financing program. Concerning the resulting financial figures the commission said in part as follows:

> For the year 1939 on a *pro forma* basis interest on funded debt was earned 2.47 times and on total fixed charges 2.11 times; total fixed charges plus preferred dividend requirements were earned 1.99 times. Such ratios are higher than the corresponding ratios in 1937 and 1938 and should progressively improve as a consequence of the retirement of the serial notes.
>
> As a result of the proposed financing, the ratio of bonds to gross property will increase from 41.7 per cent to 44.2 per cent and the ratio of bonds and serial notes to gross property will increase from 49.7 per cent to 52.2 per cent. On the basis of depreciated property as per books the ratio of bonds will increase from 47.3 per cent to 50.1 per cent and the ratio of the bonds and serial notes will increase from 56.3 per cent to 59.1 per cent. These *pro forma* figures do not give effect to the 1940 construction program in the amount of $3,359,227 of gross property additions.

Re Michigan Consolidated Gas Co. et al. (File Nos. 32-197, 65-5, Release No. 1984).

Coöperatives Not Public Utilities Subject to Commission Powers

The supreme court of Utah vacated a commission order holding that coöperative organizations were public utilities subject to commission jurisdiction [Re Garkane Power Co. 30 PUR (NS) 185]. A rural power coöperative financed by the Rural Electrification Administration, said the court in a unanimous opinion, is not a public utility within the definition of state law when it sells power only to its own members.

The court declared that there was no

need for regulating true coöperatives:

> The theory of public utility regulation is based on a recognition that most public utilities are monopolistic; that their services are necessary or convenient to the residents of the area, and that because of the conflict of interest between the utility and its customers and consumers there are likely to arise situations where rates are so high as to deny service to many, or so low as to deny a fair return on its investment to the utility and its stockholders, which in turn would tend to result in inadequate service.
>
> Therefore, regulation is desirable to harmonize and balance these interests. The services of Garkane may tend to be monopolistic in the area served because there is no other adequate utility to serve the residents there and its services will be convenient and useful, if not vital, to those residents, but the third element is totally lacking. There is no conflict of consumer and producer interests—they are one and the same. If rates are too high the surplus collected is returned to the consumers *pro rata*. If rates are too low the consumers must accept curtailed service or provide financial contribution to the corporation. If service is not satisfactory the consumer-members have it in their power to elect other directors and demand certain changes. Resort to equity, as in the case of all other mutuals, may be had if one group of members seeks to overreach the others. The function of the commission in approving rates, capital structure, etc., is unneeded by Garkane, its members, or the communities which it will serve.

Garkane Power Co. v. Utah Public Utilities Commission.

Utility May Lease Private Property without Approval of Commission

On an application by a water company for approval of the leasing of wells, approval of an agreement covering the operation of transmission and distribution mains, and approval of a reclassification of fixed asset accounts, the New York commission held that approval of the lease and of the agreement was unnecessary.

A lease of a source of supply, said the commission, should be filed, and agreements covering the operation of water lines situated on property of private owners must also be filed. Such filing is for commission information, and action if necessary.

Expense items, it was held, should not be included in capital accounts. This last matter, it was noted, was being argued before the court of appeals in another case. *Re Endicott Water Works Co. (Case No. 9035).*

Obligation of Connecting Telephone Company After Termination of Contract

The rights and obligations of a local telephone company and a long-distance company cannot be measured by the terms of a contract which has come to an end. On this ground the New York Court of Appeals held that where a joint traffic agreement had been terminated by the required notice but the companies had continued to do business, the amount to be paid must be measured in accordance with the terms of an implied contract to pay the reasonable value of the benefits rather than in accordance with the terms of the express contract which had been ended. (See also p. 547 of this issue.)

These companies had continued to furnish telephone toll service under schedules filed with the commission, and, said the court, both companies, as public service corporations, were subject to the command and direction of the commission. The traffic agreement governed long-distance messages over their lines. If they had not entered into a written agreement, the commission would have

had power to direct that the lines be connected and that the corporations give the public service over the joint lines. In that case the commission would also have fixed the service which each must perform and the proportion of the joint tolls which each should receive. The court continued:

> The duty to exchange messages and to give joint service did not arise solely from the contract and would not cease with termination of the contract. The public, too, has an interest in the performance of that duty and from the time that the parties filed a joint schedule for service to the public to be performed jointly, the public duty became fixed and could not be destroyed by mutual agreement without the approval of the public service commission. Neither party attempted to withdraw or modify the schedule of rates filed with the public service commission and until an application for such relief is made and is *granted* by the commission, both companies are under a duty to continue to furnish joint service to the public. The termination of the contract had the effect, and was intended to have the effect, only of ending the reciprocal *private* obligations of the parties towards each other in connection with the joint service and the division of receipts therefrom.

New York Telephone Co. v. Jamestown Telephone Corp.

Magazine Articles and Dissenting Opinions on Prudent Investment Yield to Statute

NUMEROUS magazine articles written by economists and dissenting opinions of various court judges were cited in Montana in support of a contention for the prudent investment theory as the proper method for determining fair value, but the Montana Supreme Court declared this position to be untenable if regarded as an exclusive method. A Montana statute, said the court, indicates that present fair value should be ascertained for the purpose of rate making.

No specific and exclusive method is mentioned in the statute, but the commission is authorized to ascertain "the value of the property." The commission is permitted to avail itself of "all information contained in the assessment rolls of various counties, and the public records of the various branches of the state government, or any other information obtainable."

The court suggested that power to regulate utility companies is similar to the power of the state in eminent domain proceedings. It said:

> In exercising its power of regulating rates of a utility company it appraises the value of the property, determines from evidence the cost and expense of operating the utility, allows for depreciation and fair return on investment, and thereupon fixes rates for service to be rendered, which in effect is a restriction on the use, enjoyment, and profits which the owner of the utility may have. In effect, the order of the public service commission limits and regulates the use of the property so far as profit is concerned and quality of service rendered, but leaves the management of the business in private hands with the attendant obligations of rendering service, meeting costs of operation and exaction of government in the way of taxes. The commission cannot under the law fix rates so low as to result in taking of property without just compensation to the owner.

Error was ascribed by appellants to the consideration of evidence as to depreciation because of the manner in which depreciation funds were used by the utility.

As to this, the court stated that these rules are set out in the statute:

> Where, in connection with the ascertainment of the present fair value of the property of a public utility, its reproduction cost is to be determined, the extent of the existing depreciation of plant and equipment must be ascertained and deducted from the cost of reproducing them new, notwithstanding they are presently capable of rendering substantially the same service as if new, and even though the effect of depreciation may be neutralized by adequate upkeep and reasonable replacements. Deductions should be made not merely for physical deteriorations, such as wear, decay, and depreciation, but also for obsolescence. Future depreciation is, of course, not to be taken into account.

Finally, the court held that depreciation is not to be measured by the amount of a depreciation reserve fund set up by a utility, but the maintenance of such a fund in an amount greater than the depreciation claimed by the utility constitutes an admission against interest, which has more evidentiary value than estimates of experts, although not irrevocably binding upon the utility. *Tobacco River Power Co. v. Public Service Commission et al. 98 P(2d) 886.*

Substitution of New Gas Type Illegal without Commission Action

CINCINNATI city authorities prescribed undiluted natural gas instead of present mixed gas service. On appeal from the ordinance the Ohio commission ruled that commission consent must first be obtained before such a substitution.

Ohio statutes forbid a public utility to withdraw an established service without the consent of the commission. They also forbid a city to compel a withdrawal of service unless it first secures the consent of the commission. The question presented was whether the proposed substitution of an undiluted natural gas service for a mixed gas service contemplated a withdrawal or abandonment of service within the meaning of the law. The commission concluded that the ordinance called for a complete withdrawal of present service and an entirely new and different type of service to be furnished, which required an application to be filed by the city. The commission, in discussing this statute, said:

> Sections 504-2 and 504-3 of the General Code of Ohio protect the company from having its services ousted summarily without the process of an application first being filed for the cessation of such services and likewise protect the city, which is the public, by preventing a company from withdrawing its services without first making application to this commission. This is a case where the city would not be protected if it was arbitrarily held that the services contemplated should be substituted without the city first making an application under the Miller Act.
>
> The city of Cincinnati is now served with a mixture of three types of gases, by the company: (1) Diluted or so-called stabilized natural gas received from the Ohio Fuel Gas Company, (2) artificial gas manufactured in the East End plant, and (3) coke oven gas received from the plant of the company near Hamilton, Ohio. The ordinance which requires the serving of "undiluted natural gas" thereby compels the withdrawal of these mixed gas services. The commission may require the company to make the substitution when it hears all the facts, but the facts cannot be presented to the commission except by first having an application filed by the city. . . .

The Cincinnati Gas & Electric Co. v. City of Cincinnati (No. 11,034).

Federal Power Commission Reports on Cost Of Safe Harbor Project

A DETERMINATION of the actual legitimate original cost of project expenditures for the period from January 1, 1933, to December 31, 1937, in the case of the Safe Harbor Water Power Corporation was made by the Federal Power Commission. Several disputed items were ruled upon.

Materials and supplies which were suitable for the permanent operating storeroom had been transferred on December 31, 1935, from the temporary storeroom. The residue, which consisted of material no longer needed, was transferred to salvage operations for disposal. The company's claim for the cost of this residue was partially disallowed. No physical inventory had

been made, and the claimed cost, said the commission, represented a residual amount resulting from a physical inventory of the materials and supplies that were moved to the permanent storeroom as compared with the book value of the materials and supplies that had been carried in the temporary storeroom. The evidence was said to establish that, during the operation of the temporary storeroom for construction, operation, and maintenance purposes, materials and supplies to a certain extent were properly allocable to operating expenses and, therefore, only the remainder would be allowed as actual legitimate original cost.

To facilitate future additions to the power plant the licensee had crushed sufficient stone near the project to meet all requirements in the near and distant future. The commission, however, allowed only the cost of such stone necessary for construction, without regard to future requirements. The remainder was disallowed as not part of the present constructed project, although it was suggested that when the stone should be used in the future and become a part of the project the cost of that stone would be considered.

Fault locator facilities were disallowed on the ground that transmission lines in connection with which they would be used were not owned by the licensee and that it had no obligation with respect to their maintenance.

An unprecedented flood in the Susquehanna river had caused the licensee to place a sealing weld around circular plates to prevent the entrance of flood waters into the power house to make them water-tight. A claim for the cost of this sealing weld was disallowed. The commission said that the removal of one waterproofing medium in favor of another type is classifiable as maintenance or repair work, but not a fixed capital cost. Moreover, the claimed cost, it was said, must be disallowed as a capital cost because the work did not result in a substantial addition to the plant. *Re Safe Harbor Water Power Corp. (Opinion No. 18-B, Project No. 1025).*

Other Important Rulings

THE California commission, in authorizing a revision of passenger train schedules of an electric railway company, said interurban carriers should be permitted to curtail their services where it appeared that the use thereof, particularly during the daytime off-peak period, does not in any way justify the existing frequency, and it further appears that the losses incurred by such carriers should be minimized. *Re Interurban Electric Railway Co. (Decision No. 32779, Application Nos. 23167, 23168).*

The Washington commission canceled as unjust its rule giving railroads the right to file rate reductions on ten days' notice without approval and without showing that an emergency threatens or exists. The rule gave the railroad an advantage over common carriers by motor vehicle, who must file proposed rate changes with the commission, provide for notice and hearing before that body, and then abide by the commission's findings. *Re Freight Rates by Rail Carriers (Cause No. 7238).*

The Pennsylvania commission held that an order directing a utility to remove, at its own expense, all facilities incidentally affected by a crossing improvement, was not intended to bar any recovery for damages caused by necessary relocations of facilities from private property. *Department of Highways v. Lehigh & New England R. Co. (Complaint Docket No. 11045).*

NOTE.—The cases above referred to, where decided by courts and regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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VOLUME 32 PUR(NS) NUMBER 4

Points of Special Interest

Titles and Index

TITLES

INDEX

FEDERAL POWER COMMISSION

City of Los Angeles et al.

v.

Nevada-California Electric Corporation

[Opinion No. 43, Docket No. IT-5512.]

Public utilities, § 73 — Electric corporation — Status — Federal Commission jurisdiction.

1. A corporation which owns and operates in interstate commerce electric facilities subject to the jurisdiction of the Federal Power Commission is a "public utility" within the purview of the Federal Power Act, p. 196.

Rates, § 13 — Federal Commission jurisdiction — Contracts — Parties.

2. The Federal Power Commission need not have statutory authority over a municipal plant complainant as a prerequisite to the exercise of its jurisdiction to pass upon the reasonableness and lawfulness of a rate contract with an electric company defendant, p. 196.

Rates, § 13.1 — Commission jurisdiction — Contracts.

3. The Federal Power Commission, in the exercise of the rate-making power vested in it by Congress, can modify a rate contract between a municipality and a public utility, p. 196.

Rates, § 227 — Change in contract — Municipality and electric company — Partial jurisdiction of Commission.

4. No injustice or hardship is imposed upon an electric company by the exercise of Commission jurisdiction to change a rate contract, on complaint by a municipality purchasing electricity, because the Commission has jurisdiction over the company and not over the municipality, since the company may file proposed changes in filed rates and charges, p. 197.

Rates, § 13 — Jurisdiction of Federal Commission — Unused schedules — Municipal contract.

5. The Federal Power Commission has jurisdiction over a rate schedule filed pursuant to a contract between a municipality and an electric company even though no electricity has been transmitted under the schedule, p. 197.

Rates, § 13 — Jurisdiction of Federal Commission — Effect of unauthorized property transfer.

6. The fact that authority was not obtained from the Federal Power Commission for the transfer of facilities by an electric corporation to a municipality is collateral to a consideration of the problem of changing rates established by a contract between such corporation and an electric producing company, and is not a bar to the exercise of Commission jurisdiction in such proceeding, p. 197.

Return, § 11 — Basis — Original cost — Contract rates.

7. The original cost of construction of a transmission line is the best evidence of the amount to be used as a rate base in a proceeding on complaint

against rates fixed by a contract in which it is agreed that the original cost shall be used as the basis for computing the charges, p. 203.

Valuation, § 170 — Charges to capital — Cost of rewinding transformers.

8. The cost of rewinding transformers at a power dam, in order to make such transformers suitable for operation at the voltage required under a contract for wholesale power service, is proper as an addition and betterment, p. 203.

Depreciation, § 14 — Basis — Original cost.

9. Depreciation rates should be related to original cost rather than cost of reproduction new, where the Commission used the original cost of a transmission line as the base for testing the reasonableness of charges for electric energy, p. 204.

Return, § 87 — Wholesale power service.

10. A return of 6 per cent was held reasonable in establishing rates for wholesale power service to a municipal plant, p. 204.

Rates, § 134 — Reasonableness — Comparison.

11. Rate comparisons do not afford a proper basis for determining the reasonableness of charges for the transmission or sale of electric energy by a power company to a municipal plant, p. 205.

[January 25, 1940.]

COMPLAINT *by municipality against rates prescribed by contract filed with the Commission; rate reduction ordered.*

APPEARANCES: Ray L. Chesebro, S. B. Robinson, Gilmore Tillman, and William J. Carr, for the complainants; Henry W. Coil and Frank P. Doherty, for the defendant.

By the COMMISSION: The city of Los Angeles, California, a municipal corporation, and the department of water and power of said city, filed with the Commission, on March 14, 1938, a formal complaint against the Nevada-California Electric Corporation, a corporate entity organized under the laws of the state of Delaware and engaged in the production, transmission, distribution, and sale of electric energy in the states of Arizona, California, and Nevada. On April 14, 1938, defendant filed answer to said complaint. Thereafter, pursuant to notice, public hearings were duly held on the issues involved in this proceeding in Los Angeles, California, beginning on June 29, 1938, and concluding on July 13, 1938, at which the parties were fully heard and introduced of record oral and documentary evidence. After the conclusion of the final hearing briefs were filed on behalf of both parties.

Allegations of Complaint and Answer

The complainants allege (a) that the rates and charges prescribed by the schedules and contracts filed with this Commission as Rate Schedule FPC No. 4 by the Southern Sierras Power Company between a predecessor in interest of the complainants, the Los Angeles Gas and Electric Corporation, and predecessors of the defendant, the Southern Sierras Power Company and the Nevada-California Power Com-

pany, are unjust and unreasonable, and (b) that the interpretation and application of such schedules and contracts by the defendant, the Nevada-California Electric Corporation, as affecting and pertaining to such rates and charges were, are, and will continue to be unjust, unreasonable, and in violation of § 205(a) of the Federal Power Act (16 USCA, § 824d), and pray that the Commission determine the just and reasonable rate, charge, and contract to be thereafter observed and enforced for the service rendered and to be rendered to the complainants by said defendant.

The defendant, in its answer, asks the dismissal of the complaint and sets forth several objections to the jurisdiction of the Commission to entertain the complaint, and proffers defenses, upon the merits, to the allegations of the complaint.

Rate Schedule FPC No. 4 provides for the payment by the city of Los Angeles to the defendant of ". . . a sum equal to . . . 4.715 per cent per annum of the original cost of construction of . . . Boulder canyon line, substations, and appurtenant equipment and all additions and betterments thereof made from time to time, to cover return, depreciation, and overhead. A statement of the original cost of construction . . . thereof to the date of this agreement is hereunto annexed, agreed to, . . . and marked 'Exhibit A.' Said statement shall not and does not include equipment at said dam or at said San Bernardino substation not necessary for the transmission of electric energy for Los Angeles Company. . . ."

The contract also provides for the reimbursement of one-half of the actual cost of all repairs, maintenance, and operation of the line, substations, and appurtenant equipment, including claims for injuries to persons or property and minor replacements and renewals. It also provides for the reimbursement of one-half of all taxes applicable to this line.

Description and History of the Parties

The acquisition, by purchase, by the city of Los Angeles, one of the complainants, of the facilities and assets of the Los Angeles Gas & Electric Corporation, included the assumption of the obligations and benefits of Rate Schedule FPC No. 4. The properties were taken over on February 1, 1937, the city having theretofore amended its charter to cover the assumption of these contract obligations. The Los Angeles Gas and Electric Corporation had previously served about one-third of Los Angeles in competition with the city's plant. Its generating facilities consisted of a 70,000-kilowatt capacity plant in Los Angeles and a 65,000-kilowatt capacity plant at Seal Beach, California.

The defendant in this proceeding is the successor by merger to the Southern Sierras Power Company and the Nevada-California Power Company, the former operating in California, the latter in Nevada, both having been wholly owned for many years by the defendant. The territory served by this system includes the counties of Mono, Inyo, Kern, San Bernardino, Riverside, and Imperial, in the state of California, the counties Nye and Esmeralda in the state of Nevada, and Yuma county in the state of Arizona. Energy is also transmitted for wholesale use in Mexico. It is admitted that

the defendant and its predecessors were operating in interstate commerce.

The Southern Sierras Power Company had a steam plant at San Bernardino, California, with a capacity of 11,250 kilovolt amperes and a Diesel plant at Blythe, California, with a capacity of 400 kilovolt amperes. Its resources, however, were almost exclusively hydroelectric consisting of storage and stream flow plants on the eastern side of the Sierra Nevada mountains. Its output was, therefore, subject to wide fluctuations in accordance with the snow fall until it entered into an agreement with the Los Angeles Gas & Electric Corporation in 1927 under the terms of which each company agreed to furnish to the other emergent service, and the Southern Sierras Power Company to build a 61-mile, 40,000-kilowatt nominal capacity 110,000-volt transmission line from San Bernardino to the plant of the Los Angeles Gas & Electric Corporation at Seal Beach at an approximate cost of $750,000. The Southern Sierras constructed the Boulder-San Bernardino line in order to sell power to the government for the construction of Boulder dam and to transmit power from Boulder dam into its system after the project was completed.

Jurisdictional Questions

[1] The defendant owns and operates facilities subject to the jurisdiction of the Commission and it is therefore a "public utility" as defined in § 201(e) of the Federal Power Act. The defendant does not contest this fact but raises certain other questions of a jurisdictional nature.

[2, 3] The defendant contends that the Commission is deprived of jurisdiction in this case because the complainants, city of Los Angeles, a municipal corporation, and the department of water and power of the city of Los Angeles are exempt from the Commission's jurisdiction under § 201(f) of the Federal Power Act (16 USCA, § 824).

Defendant in support of this contention concedes that we have jurisdiction to modify the provisions of a contract for public utility service whether the contract be made before or after the adoption of the regulatory statute. The defendant asserts, however, that the contract here involved does not come within this well-settled rule, because by specific provision in the act the complainants are exempt from our regulatory jurisdiction. In effect, the contention of the defendant appears to be that it is necessary for the Commission to have statutory authority over both parties as a prerequisite to the exercise of the Commission's jurisdiction to pass upon the reasonableness and lawfulness of the provisions of the contract in the instant case.

The defendant's contention in this respect is obviously without merit. Even if it be conceded that under § 201(f) of the act (*supra*) the complainants are exempt from the Commission's regulatory jurisdiction, nevertheless § 306 of the Federal Power Act specifically authorizes a "person" or "municipality" to file a complaint with the Commission, and the city and the Department are before the Commission in the capacity of complainants invoking the Commission's authority over a public utility admittedly subject to the Commission's jurisdiction.

The authority of a Federal regula-

tory agency, in the exercise of the rate-making power vested in it by Congress, to modify a rate contract between a state or municipality and a public utility, has been settled beyond question. New York v. United States, 257 US 591, 600, 601, 66 L ed 385, PUR1922C 455, 42 S Ct 239; United States v. Hubbard, 266 US 474, 477, 69 L ed 389, PUR1925C 388, 45 S Ct 160. See also Norman v. Baltimore & O. R. Co. (1935) 294 US 240, 307, 79 L ed 885, 55 S Ct 407, 95 ALR 1352, where the cases on the subject are reviewed.

[4, 5] The defendant further argues the fact that the complainants are exempt from, while the defendant is subject to, the Commission's jurisdiction, results in a situation wherein the complainants would have the right to file a complaint with the Commission against the defendant claiming that the rates are unreasonably high, whereas the defendant would not have the correlative right to file with the Commission a complaint against the city and the department claiming that the rates are unreasonably low. Granting that the Commission is without authority to entertain such a complaint filed by the company against the city and the department, no injustice or hardship is thereby imposed upon the company. Under § 205(d) of the act, *supra*, public utilities may file with the Commission proposed changes in their filed rates and charges. This provision appears to negative defendant's contention and to afford adequate protection to it. In addition the defendant questions the authority of the Commission over the charges provided for in Rate Schedule FPC No. 4, upon the theory that there is not, has not been, and actually may never be, any transmission of electric energy thereunder. Suffice it to say upon this contention, said rate schedule covers rates and charges made, demanded, or received by the defendant for or in connection with the transmission or sale of electric energy by facilities subject to the jurisdiction of the Commission, and the Commission accordingly has jurisdiction over such rates and charges under the specific provisions of the Federal Power Act.

[6] The defendant further contends that we are without jurisdiction in this proceeding as no application was made to us for authorization to transfer the facilities of the Los Angeles Gas & Electric Corporation, including Rate Schedule FPC No. 4, to the city of Los Angeles, and that the contract of transfer is therefore void if the city is subject to the Commission's jurisdiction. Although it appears from the record that electric energy purchased from the Los Angeles Gas & Electric Company and transmitted by the Southern Sierras Power Company to Boulder for use in connection with the construction of the dam did move it interstate commerce and that the facilities of the vendor company may have been subject to our jurisdiction under § 203 of the Federal Power Act (16 USCA, § 824b) we are of the opinion that such fact is collateral to a consideration of the problem here involved, and that our consideration and disposal of the issues in the case at bar is not inconsistent with any unasserted or unexercised authority this Commission may have under § 203 of the act. Any failure to comply with its requirements may be dealt with in another proceeding.

The Additions and Betterments at Victorville

In considering the matter of additions and betterments at Victorville, California, it is interesting to note the record indicates that although the Boulder-San Bernardino line was originally operated at 90,000 volts, it was not feasible to operate said line permanently at this voltage and complainants did not seriously urge such operation. In fact, the entire line was operated for approximately eight months at 110,000 volts in the transmission of power from the dam into the defendant's system. At the end of this period, the voltage was changed from 110,000 volts to 132,000 volts on the portion of the line between Boulder dam and Victorville, and from 110,000 volts to 90,000 volts between Victorville and San Bernardino with a step-down transformer at Victorville. These changes were made by the defendant without securing the consent of the complainants. However, the defendant undoubtedly had the right to make these changes without securing such consent by reason of its ownership of the line. Notwithstanding these circumstances, it is important to note that the wording of the contract here under consideration provides that the complainants can be charged only for such portion of the additions and betterments as are "necessary for the transmission of electric energy for Los Angeles Company" (the complainants).

The question to be decided therefore is what portion of the equipment at Victorville is necessary for transmission of the complainants' share of the line capacity (fixed at 40,000 kilovolt amperes by Boulder generator capacity or 37,500 kilovolt amperes by transformer capacity), and what was installed for the convenience or operating advantage of the defendant.

The Boulder-San Bernardino line was operated at 90,000 volts at the sending end of the line during the period when Boulder dam was under construction. Power could be sent from either San Bernardino or Victorville according to the connections at Victorville. A portion of this power was purchased from the Los Angeles Gas & Electric Corporation at Seal Beach and transmitted to San Bernardino over the 110,000-volt line through the step-down transformer at San Bernardino. Power could also be transmitted from the Owens valley 90,000-volt lines which were connected at Victorville with the 90,000-volt line to Boulder dam, the object being to protect the service of supplying construction power to the government at Boulder dam. Although the voltage was somewhat less at Boulder, no serious loss was sustained as synchronous condensers were used in the substation at Boulder dam.

So long as the line from San Bernardino was maintained at 90,000 volts, there were three lines operating, or capable of being operated, in parallel from San Bernardino to Victorville by use of what amounted to a double bus at Victorville. The defendant's vice president and general manager testified that the substation at Victorville was a sectionalizing substation on its two transmission lines leading from Owens valley to San Bernardino. Later there was an interconnection made with the Boulder line for the purpose of protecting that

service while selling power to the government. The switching arrangement used during the construction period provided for connection of lines at the substation and for cutting out any section of the line that might be faulty. The load at Victoryville could be connected to any line desired in order to furnish power during the construction period at Boulder. Owens valley lines could be utilized through Victorville to Boulder, whenever there was transmission difficulty between Victorville and San Bernardino.

Sometime after the expiration of the construction of Boulder dam, an interim arrangement was entered into by which the defendant secured power from the Boulder plant and transmitted it to San Bernardino over the Boulder line. For this purpose, the transformers at Boulder were connected to operate at 110,000 volts and the line at the San Bernardino substation and the Seal Beach line were connected with the same bus bar. Loads as high as 40,000 kilowatts were carried over the line.

Witnesses for the defendant testified, without detailing any unsatisfactory conditions of operation, that the Boulder-San Bernardino line when operated at 110,000 volts constituted a "makeshift arrangement," a freak connection, and that the defendant always intended to operate the line at 132,000 volts.

It would appear from certain admissions of the defendant's witnesses that an important reason for the installation of the additions and betterments at Victorville was to increase the capacity of defendant's system by approximately 37,500 kilovolt amperes. The total amount of power which could be received by the defendant from Boulder dam and under Los Angeles Gas & Electric Corporation's interchange agreement was limited by transformer capacity at San Bernardino to the amount that might be obtained from either source alone, but after completion of the additions and betterments at Victorville, the total capacity is apparently increased by 37,500 kilovolt amperes.

Another feature of importance which appears to be a distinct benefit to the defendant is that the installation of a transformer bank at Victorville permitted connection of the two 90,000 volt lines from the Owens valley plants with the Victorville-San Bernardino section of the Boulder-San Bernardino line as had been done during the period in which the entire Boulder-Victorville-San Bernardino line was operated at 90,000 volts. So long as the Boulder-San Bernardino line was operated at 110,000 volts, power could not be taken off at Victorville without the installation of transformer banks and there was no possibility of replacing the circuit by, or using it in substitution for, a portion of either of the circuits from the defendant's power plants to San Bernardino without the installation of such facilities at Victorville.

The complainants, as successors in interest to the rights of the Los Angeles Gas & Electric Corporation, have the right to the use of one-half of the Boulder-San Bernardino circuit only under Rate Schedule FPC No. 4. They are not entitled to use any part of the second and third circuit between Victorville and San Bernardino. In fact, witnesses for the complainants testified that the city was in a better

position when the lines were separated because it will sustain greater line losses when the lines are operated in parallel from Victorville to San Bernardino and because it will have no control of the power transmitted under present conditions at Victorville as the power from Boulder dam will be mingled with the power from the other plants.

It appears reasonable to assume that the defendant desired to restore connection at Victorville in order that the conditions on its system would again correspond approximately to those prevailing during the time that the Boulder line was operated at 90,000 volts. This could be done by changing the portion of the Boulder-San Bernardino line from Boulder Dam to Victorville to 132,000 volts and installing the new facilities at Victorville while retaining the remainder of the line at 90,000-volt operation as the connections at Victorville restored the system to approximately the electrical equivalent of conditions when the entire line operated at 90,000 volts.

The defendant's witnesses state that the Boulder-San Bernardino line was originally designed for 132,0000-volt operation, that it was the understanding between the predecessors to the parties in this case that it should be so operated and that the defendant installed equipment which it considered necessary to change the voltage without the consent of the complainants. No attempt was made, however, to justify the expenditure in comparison with that needed for operation at a lower voltage. The defendant concedes that the propriety of charging some of the equipment at Victorville to the complainants was open to question but nowhere defines what equipment should be excluded.

The witnesses for the complainants testify that the installation of the equipment at Victorville is not necessary for the transmission for the city of energy attributable to the gas company's allotment, that the change to 132,000 volts makes the circuit more vulnerable to interruption, and that the city is greatly prejudiced by the location of the additions at Victorville, rather than at San Bernardino, as synchronous condensers should be installed at the receiving end of the circuit rather than at a distance of approximately 40 miles from that point. The complainants further assert that if the synchronous condensers are not at the receiving end, the variation in voltage is greater, as the condensers control the delivery of voltage, and that the connection at Victorville has the effect of pooling power of the defendant over any of the three circuits between Victorville and San Bernardino, which would deprive the complainants of their proper allocation of power and cause interruptions to the service.

That the carrying power of the line at 110,000 volts is ample for the power contracted for at Boulder seems to be established by the testimony that peaks of 40,000 kilowatt hours were transmitted over the line when operating at this voltage, and by the fact that this was done without use of the synchronous condensers which are claimed to be necessary at Victorville even when operating at 132,000 volts.

Opinion evidence was introduced to show the saving in line losses when operating at the higher voltage. However, the highest priced energy to be

transmitted cost only 1.63 mills per kilowatt hour, and a considerable portion of it cost only 0.5 mill. Such indicated potential savings may be dismissed when they are to be balanced against fixed charges and operating expenses on an increase in investment of approximately $400,000.

Careful examination of the record is convincing that defendant made the additions and betterments at Victorville to enable it to take Boulder power off at Victorville for its system without being subjected to the peril of storms in the Cajon Pass; effect parallel operation on Victorville-San Bernardino section of the Boulder line, with the corresponding sections of defendant's Owens Valley-San Bernardino 90,000 volt lines; effect the installation of 15,000 kilovolt amperes of synchronous condenser capacity at a point where it is equally useful on the Boulder-San Bernardino circuit and on the two Owens Valley-San Bernardino circuits; to increase by 37,500 kilovolt amperes the total coincident peak of power that may be drawn by the defendant from Boulder and Seal beach by the installation of the transformer bank; and to facilitate switching of transmission lines by the installation of new and additional oil circuit breakers, air break switches, and disconnecting switches at Victorville.

The cost of the transmission line, with appurtenances as they existed prior to the start of work at Victorville, is conceded by complainants. No question is raised regarding the propriety and reasonableness of the operating expenses or taxes on the line. In fact, during the course of the hearings counsel for the defendant offered to stipulate that the cost of two additional lines was not included as additions and betterments and that no additional charge would be made for complainants' use of the three circuits instead of the one used originally. As the complainants undoubtedly have adequate synchronous condenser capacity on their system, and as 40,000 kilowatts was transmitted over the line at 110,000 volts without any synchronous condenser capacity at Victorville, it seems clear that at Victorville, although highly desirable from the standpoint of the defendant's system operation, they are not necessary for transmission of power to the complainants under the terms of the contract.

In addition the location of the condensers at Victorville makes them valueless to the complainants and as they are legally entitled to the use of one-half of one line only between Victorville and San Bernardino, according to the terms of the contract, instead of half of three lines, the synchronous condensers and the transformer bank at Victorville are not necessary to transmit the complainants' half of 40,000 kilovolt amperes contracted for at Boulder. The transformer bank permits power to be supplied for the defendant load fed from Victorville but gives little or no advantage to the complainants. Upon such a record, we are of the opinion that the defendant has no right under the transmission agreement to bill the complainants for any share of the additions and betterments at Victorville which were installed for the convenience and operating advantage of the defendant.

The Seal Beach Line

An important question involved in this case concerns the treatment to be accorded to the 61-mile transmission line extending from Seal Beach to San Bernardino, hereinafter called the Seal Beach line. In arriving at a rate base the city excludes this line from its computations, whereas the defendant company includes it. The original cost of the line amounts to $748,439 and it is accordingly an item of considerable importance. The construction of this line had its origin in a power interchange agreement entered into on December 23, 1927, by and between the Los Angeles Gas & Electric Corporation and the Southern Sierras Power Company. The agreement provided for the construction by the Sierras Company, at its own sole cost and expense, of a transmission line from its steam-generating plant in San Bernardino to a point of interconnection with the steam-generating plant of the Los Angeles Company in Seal Beach.

Under the terms of this agreement each company agreed to deliver to the other, upon request, such amount of electric energy as might be needed to meet its emergent conditions or demands to the extent of its available surplus at the out-of-pocket cost thereof to the delivering company, plus 15 per cent to cover contingencies and incidentals. Out-of-pocket costs were defined to consist of fuel costs plus one mill per kilowatt hour to cover all other items. The term of the contract was for fifteen years and was thereafter to run from year to year unless terminated by either party on one year's notice.

Pursuant to the terms of this arrangement the Sierras Company constructed a 40,000-kilowatt, 110,000-volt transmission line from San Bernardino to Seal Beach, completing it in February, 1930. (This line was constructed prior to the construction of the line from San Bernardino to Boulder to supply energy to the dam for construction purposes.)

On May 18, 1932, the interchange agreement was amended by the parties. This amendment recited that each of the parties had entered into a contract with the United States to purchase and receive power for the Hoover dam and Boulder canyon project and desired to extend the interchange agreement so that it would run concurrently with the effective periods of said agreements with the United States. The interchange agreement was accordingly extended for a period of fifty years from and after the date upon which electric energy should be ready for delivery from the Hoover dam project to the city of Los Angeles. No energy, however, was received by the complainants from this project until June 1, 1937.

The record in the instant case discloses that under the provisions of Rate Schedule FPC No. 4 energy is to be transmitted over the Seal Beach line free of all cost to the city of Los Angeles (as successor in interest to the Los Angeles Gas & Electric Corporation) so long as the city stands willing and able to supply such amounts of electric energy as may be needed to meet emergent conditions of the defendant. This service, it is stated, could not be secured by the defendant otherwise for less than $5 per kilowatt a year, or $100,000 for 20,000 kilowatt standby, and as to this transmission service the considera-

tion to the defendant is accordingly very substantial.

It would appear from an examination of the record that the parties did not intend that the Seal Beach line should be included in testing the reasonableness of the charges under Rate Schedule FPC No. 4. The fact that under the specific provisions of this rate schedule the city of Los Angeles is not required to pay any part of the cost of the transmission of energy over the Seal Beach line so long as the city stands willing and able to supply electric energy needed to meet emergent conditions of defendant company appears to indicate that the parties did not contemplate that a return should be allowed on this line. We conclude, therefore, that the Seal Beach line should be excluded from the rate base for the purpose of testing the reasonableness of the return received by defendant under Rate Schedule FPC No. 4.

The Cost of Rewinding Transformers

[7, 8] The uncontradicted evidence of record is to the effect that the transformers purchased for use at Boulder dam would not be suitable for operation at 110,000 volts once the generator purchased for defendant was in operation. The estimated cost of rewinding the transformer bank for operation at 110,000 volts instead of 132,000 volts is between $40,000 and $50,000 and the testimony is ample to show the feasibility of operation at that voltage.

The Reasonableness of the Charges under Rate Schedule FPC No. 4

In determining the reasonableness of the charges made pursuant to Rate Schedule FPC No. 4, we accept the fact that the agreed cost of the Boulder canyon-San Bernardino line, as of April 30, 1938, was in the sum of $1,132,858.44. The city is entitled to the use of only one-half of the capacity of this line. Therefore, the payment of 4.715 per cent, the contract rate, on the total original cost of the line is an equivalent to a payment of 9.43 per cent upon one-half of its original cost. Stated in another way, the reasonableness of the payment made by the city under the rate schedule may be ascertained by relating the payment to one-half of the agreed cost, or $566,429.22.

The defendant introduced in evidence estimates of the cost reproduction new of the properties involved, which exceeded in amount the agreed original or historical cost. The defendant's witnesses estimated the reproduction cost new of the Boulder canyon line and terminal as $1,358,299, or more than $226,000 in excess of historical cost. However, we believe the original cost of construction of the Boulder canyon line is the best evidence of the amount to be used as a rate base in this proceeding.[1] It is significant that the parties themselves, by specific provision in the contract designated as Rate Schedule FPC No. 4, have agreed that the original cost of the line shall be used as the base for computing the charges.

For the purpose of testing the reasonableness of the charges we will accordingly use as a base one-half of the original cost of the line, which amounts to $566,429. To this should

[1] See Clark's Ferry Bridge Co. v. Pennsylvania Pub. Service Commission (1934) 291 US 227, 78 L ed 767, 2 PUR(NS) 225, 54 S Ct 427.

be added one-half of the cost of rewinding transformers at Boulder dam, which we believe to be proper as an addition and betterment. It has been estimated that the cost of rewinding these transformers would be between $40,000 and $50,000. We conclude, therefore, that the amount of $590,000 is a proper base to be used for computing the reasonableness of the charges.[2]

As the payment of 9.43 per cent per annum on one-half of the original cost of the Boulder canyon line covers overhead, depreciation, and return, it is necessary to determine what portion of the payment is properly allocable to these items, respectively.

The complainants computed the amount for overhead applicable to the Boulder canyon line by allocating the defendant's general expenses on the basis of payrolls which is the method used by the defendant for accounting purposes, and arrived at a figure of $2,500. On the other hand, defendant offered testimony which allocated overhead expense on the Boulder canyon line on the basis of property and also on the basis of operating expenses. A witness for the defendant, using a judgment figure, arrived at the sum of $5,000 for overhead expense on the Boulder canyon line. In its brief, the defendant claims an allowance of between $8,000 and $10,000 for overhead on this line. For the purpose of testing the reasonableness of the return, we accept the sum of $5,000, used by the defendant company's witness, as proper for total overhead expenses applicable to the Boulder line. This should be reduced to $2,500, or one-half, to reflect the portion allocable to the complainants.

[9] The complainants introduced in evidence an exhibit which showed the annual depreciation expense on the Boulder canyon line to be $8,620. This figure was determined by applying to the cost of the various classes of depreciable property, rates of depreciation, computed on the 6 per cent sinking-fund basis, which composited to .76 per cent. The defendant computed annual depreciation expense both on the 6 per cent sinking-fund and the straight-line bases, and arrived at annual depreciation expense considerably higher than used by the complainants. The higher figures used by the defendant were due principally to the fact that the rates of depreciation were related to the depreciated reproduction cost new of the properties rather than the original cost of the properties. We have used the original cost of the Boulder canyon line as the base for testing the reasonableness of the charges, and, consistently therewith, we believe the depreciation rates should be related to original cost rather than cost of reproduction new. We, therefore, have adopted the complainants' annual depreciation expense allowance of $8,620. One-half of this amount, or $4,310, is allocable to the complainants.

[10] There remains the question of a fair and reasonable rate of return. The defendant and its predecessors were financed principally through the issuance of bonds, and evidence was introduced showing the historical cost of money to them. Evidence was also

[2] The defendant introduced evidence on so-called "observed depreciation." However, as the annual depreciation expense allowance has been computed by the sinking-fund method, an undepreciated base will be used. See Los Angeles Gas & E. Corp. v. California R. Commission, 289 US 287, 77 L ed 1180, PUR 1933C 229, 53 S Ct 637.

introduced by the complainants showing costs of money to other electric and gas companies. During the period the Boulder canyon line was constructed (1930–1931), the cost of money to the Southern Sierras Power Company, the predecessor to the defendant which constructed the line, was shown to be in the neighborhood of 6 per cent. Upon consideration of all of the evidence on this subject in the case at bar, we conclude that 6 per cent is a fair and reasonable rate of return to be allowed the defendant. On a rate base of $590,000, the return allowance amounts to $35,400.

To recapitulate, the following computation reflects our conclusions with respect to the amounts properly chargeable to the complainants for overhead, depreciation, and return:

Overhead	$2,500
Depreciation	4,310
Return	35,400
Total	$42,210

Upon the record, therefore, we conclude that the payments made by the city of Los Angeles to the defendant for return, depreciation and overhead under Rate Schedule FPC No. 4, to the extent that they exceed the amounts set out above, are unjust and unreasonable.

Rate Schedule FPC No. 4 also provides for the payment by the city of one-half of the actual cost of all maintenance and operating expenses of the Boulder canyon transmission line, substations and appurtenances, including claims for injuries to persons or property and minor replacements and renewals. It also provides for the payment by the city, of one-half of all taxes of any kind, direct and indirect, upon the transmission line, substations, and appurtenances. In view of the fact that these payments are based upon actual cost, it does not appear to be necessary to undertake an analysis of the payments made or to forecast the payments to be made for such costs.

[11] In support of its contention that the charges made pursuant to Rate Schedule FPC No. 4 are just and reasonable, the defendant introduced into evidence several rate comparisons. We do not, however, believe these rate comparisons afford a proper basis for determining the reasonableness of the charges here involved.

The complainants urge that we should initiate a new two-part rate contract consisting of (a) a service charge to cover its right to use the line up to one-half of its capacity, upon reasonable notice, and (b) a liberal charge for actual use of the line in the transmission of energy.

We are of the opinion that the present record does not provide a sufficient basis for substituting a new type of rate in lieu of the provisions of Rate Schedule FPC No. 4, by establishing a schedule based upon a service charge and a charge for actual transmission in the manner advocated by the complainants.

Findings

Upon consideration of the complaint and answer, evidence adduced of record, and the briefs filed in this proceeding, the Commission *finds* that:

(1) The Nevada-California Electric Corporation owns and operates facilities subject to the jurisdiction of the Commission and it is, therefore, a

public utility as defined in § 201(e) of the Federal Power Act (16 USCA, § 824);

(2) The city of Los Angeles, California, is a municipal corporation, and the department of water and power of the city of Los Angeles is a department of said municipality and as such they are proper parties complainant in this proceeding, and authorized to file the complaint herein under the provisions of the Federal Power Act;

(3) Rate Schedule FPC No. 4 provides for rates and charges subject to the jurisdiction of this Commission;

(4) The Commission is empowered, in the exercise of the rate-making function vested in it by Congress under the provisions of the Federal Power Act, to determine the reasonableness of the rates and charges contained in Rate Schedule FPC No. 4 and to revise and modify the contract provisions contained therein;

(5) The Commission has jurisdiction over said Rate Schedule FPC No. 4 notwithstanding the fact that it is alleged that there is not, has not been, and may never be any transmission of electric energy thereunder;

(6) The additions made by the Nevada-California Electric Corporation at Victorville are not additions and betterments within the meaning of Rate Schedule FPC No. 4, and the complainants are not required to pay a return thereon or any portion of the expenses of operation or maintenance thereof;

(7) The transmission line extending from Seal Beach to San Bernardino should be excluded from consideration in testing the reasonableness of the charges made pursuant to Rate Schedule FPC No. 4;

(8) The cost of rewinding transformers at Boulder dam is a proper addition and betterment within the meaning of Rate Schedule FPC No. 4, and the complainants should be required to pay a return upon one-half thereof;

(9) The original cost of construction of the Boulder canyon line is the best evidence of the amount to be used in determining the rate base herein as of April 30, 1938;

(10) The rate base used for the purpose of testing the reasonableness of the charges made under Rate Schedule FPC No. 4 should be $566,429, plus an amount representing one-half of the cost of rewinding transformers at Boulder dam, or a total of $590,000;

(11) The amount of $5,000 represents total overhead expense on the Boulder canyon line and one-half of this amount, or $2,500, is the proper portion to be borne by the complainants;

(12) The annual depreciation expense on the Boulder canyon line, submitted by the complainants, which was determined by applying to the cost of the various classes of depreciable property rates of depreciation computed on a 6 per cent sinking-fund basis and compositing to .76 per cent, is adopted as a proper annual depreciation allowance. This allowance amounts to $8,620, one-half of which, or $4,310, is properly allocable to the complainants;

(13) A fair and reasonable rate of return to be allowed to the defendant under the provisions of Rate Schedule FPC No. 4 is 6 per cent per annum on a rate base of $590,000, or a total of $35,400;

(14) The payments to be made by the complainants under Rate Schedule

FPC No. 4, which have been found to be reasonable and proper in Findings (11), (12), and (13) hereof, are exclusive of the payments for one-half of the actual cost of maintenance, operating expenses, claims for injuries to persons or property, minor replacements and renewals, and taxes, the reasonableness of which said latter payments is not a direct issue in this proceeding;

(15) The payments made by the city of Los Angeles to the defendant for return, depreciation, and overhead expense under Rate Schedule FPC No. 4, to the extent that such payments exceed the amounts found herein, are unjust and unreasonable.

(16) The present record does not warrant the substitution of a 2-part rate, consisting of a service charge and a charge for actual transmission of energy, in lieu of the rates and charges provided for in Rate Schedule FPC No. 4.

An appropriate order of the Commission will be entered in accordance with this opinion and findings.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Milwaukee Gas Light Company

[2-U-1438.]

Re Madison Gas & Electric Company

[2-U-1439.]

Intercorporate relations, § 15 — Service contracts — Commission approval — Related companies.

Service contracts between public utility companies and an affiliated service company were approved as providing arrangements for determining the cost of service rendered in accordance therewith and as reasonable and consistent with the public interest.

Intercorporate relations, § 12 — Jurisdiction of Commission — Service contracts.

Statement that the reasonableness of the management in requesting services under a contract with an affiliated service company, and the value and cost thereof, are subject at all times to the scrutiny of the Commission in accordance with § 196.52, Wisconsin Statutes, p. 210.

Expenses, § 83 — Payments to affiliates — Service contracts.

Statement by Wisconsin Commission that when it is shown that services under a service contract with an affiliated service company are necessary and aid the operating company in serving consumers more economically and that the charges therefor are reasonable costs, these charges are reasonable costs of management, p. 210.

WISCONSIN PUBLIC SERVICE COMMISSION

Applications by public utility companies for approval of proposed service contracts with affiliated service company; granted subject to conditions.

By the Commission: Under dates of January 27 and 28, 1939, the Milwaukee Gas Light Company and the Madison Gas and Electric Company filed petitions with the Commission requesting approval of identical service contracts between themselves and United Light and Power Service Company. Copies of the proposed contracts were submitted with the petitions for approval. Petitioners also asserted that valuable services had been received from the Service Company since July 1, 1938, and therefore requested that the Commission approve July 1, 1938, as the effective date of the contracts.

The petitioners represent that United Light and Power Service Company (hereinafter referred to as the Service Company) is a Maryland corporation and that 100 per cent of its stock is owned by United Light and Power Company (hereinafter referred to as the parent company). The parent company through subsidiary holding companies, including American Light and Traction Company, owns 97 per cent of the voting stock of Milwaukee Gas Light Company and all of the common stock of Madison Gas and Electric Company except seven qualifying shares held by the directors.

Petitioners assert that the proposed service contract is reasonable and consistent with the public interest; that the services proposed to be rendered by the Service Company are or may be necessary in the conduct of petitioners' business; that the services to be rendered are reasonably worth more than the charges to be made therefor, and are rendered without profit to the Service Company; and that these services can be rendered to petitioners more economically by the Service Company than by other agencies or by the petitioners' own organizations.

Since the petitioners and the Service Company are affiliated interests within the meaning of § 196.52(1), Wisconsin Statutes, the proposed contracts cannot be made effective until this Commission issues its written approval. A hearing was deemed advisable and was held in Madison on September 19th before Commissioner Robert A. Nixon.

Appearances: Milwaukee Gas Light Company, by Bruno Rahn, President, Louis Smith, Secretary, and Miller, Mack & Fairchild, Milwaukee, by Bert Vandervelde, Attorney; Madison Gas and Electric Company, by John St. John, President, and Olin & Butler, Madison, by Robert M. Rieser, Attorney; 741 Franklin Company; REB Holding Company; Linnard Building Co., Inc.; Ambassador Corporation; E. M. Goodman, Milwaukee, by E. M. Goodman, Attorney; of the Commission Staff: C. J. Jasper, Attorney; A. R. Colbert, Chief of Accounts and Finance Department, E. W. Morehouse, Chief of Rates and Research Department, and H. J. O'Leary, Senior Case Investigator.

In brief, the proposed service contract provides that, to the extent requested and whenever requested by petitioners, the Service Company will render any of the accounting, administrative, construction, engineering, executive, financial, insurance, new business, personnel, purchasing, rate, tax, valuation, and other services which its organization is equipped to furnish. The basic principle to be adopted in determining charges is that all costs which without excessive effort or expense can be definitely related and identified will be charged directly to associate companies. In addition, the proposed contract outlines in general the methods to be used in allocating among specific associates, groups of associate operating companies, and groups of associate holding companies those charges which are not assigned directly to such associates. The determination of charges to associate companies does not contemplate any profit to the Service Company nor any return on capital used by the Service Company in rendering its services.

As of September 26, 1938, the Securities and Exchange Commission, pursuant to Par. (b) of § 13 of the Public Utility Holding Company Act, 1935 (15 USCA, § 79m) issued an order in which approval was granted to the Service Company to conduct its business as a subsidiary Service Company, subject to certain conditions enumerated in the order.

The presidents of the respective operating companies testified at the hearing with respect to the need for the various services available from the Service Company. Both witnesses testified that the proposed contract would make available, upon demand, expert services provided by the Service Company, thereby relieving the operating companies of the burden of maintaining additional expert personnel whose services would not be fully utilized. They also testified that in view of past experience and in view of the provisions of the proposed contract it appeared that the cost to the operating companies would be less than if equivalent services were secured from other sources.

In behalf of the Service Company, one of its officers testified that the Service Company maintained a highly trained and expert personnel whose experience in rendering service to the fifty-five operating and holding companies in the United Light and Power System made them especially valuable in rendering service to individual associates. The witness also pointed out that by maintaining one group of experts for the entire group of associates, their services would be almost constantly utilized and there would be no necessity for the "loading" of charges to take into account slack periods. There was also offered on behalf of both the petitioners and the Service Company certain exhibits prepared by the Service Company showing the allocation of Service Company charges for the year ending June 30, 1939. Subsequent to the hearing, at the request of the Commission, the Service Company submitted a further breakdown of charges for the same period.

These data show that for the year ending June 30, 1939, the following percentage distribution of charges was obtained:

(1) Distribution of charges between holding and operating companies	Holding Companies	Operating Companies	Total
Direct charges	40.9%	59.1%	100%
Group charges	60.6	39.4	100
Administration	49.9	50.1	100
Total	47.4	52.6	100
(2) Per cent of various classifications of charges to the total charges			
Direct charges	43.4%	56.5%	50.3%
Group charges	24.5	14.5	19.2
Administration	32.1	29.0	30.5
Total	100%	100%	100%

While the proposed contract sets forth in some detail the various methods to be used in ascertaining the charges applicable to individual associates, it is nevertheless true that charges other than direct charges may vary considerably from time to time. Under the circumstances and in view of the broad powers conferred upon the Commission under § 196.52, Wisconsin Statutes, we are inclined to regard the contracts at issue merely as commitments on the part of the petitioners to exercise options to take such services from the Service Company as the management of the operating companies may deem necessary from time to time. The reasonableness of the management in requesting such services, and the value and cost thereof, are subject at all times to the scrutiny of the Commission in accordance with § 196.52. So far as the Service Company is concerned the contract represents a commitment to render to associates, when requested, the various services enumerated therein and also provides the framework for the determination of charges to associates for services rendered.

E. N. Goodman, representing certain objectors, took the position, as we understand the purport of his questions, that since these contracts were with an affiliated service company, they were not the result of arm's-length dealings, and hence that the charges made for services thereunder should not be approved as proper items of operating expenses to be recovered out of rates paid by consumers. When it is shown that the services are necessary and aid the operating company in serving consumers more economically and that the charges therefor are reasonable costs, we are of the opinion that these charges are reasonable costs of management. The information required by the Commission and the conditions herein ordered are designed to insure compliance with this principle.

Finding

The Commission finds:

That satisfactory proof has been submitted that the proposed contracts provide arrangements for determining the costs of service rendered in accordance therewith and that said contracts, subject to the conditions herein ordered, are reasonable and consistent with the public interest.

ORDER

It is therefore *ordered:*

That the proposed contract between Milwaukee Gas Light Company and United Light and Power Service Company, and the proposed contract be-

tween Madison Gas and Electric Company and United Light and Power Service Company, both contracts to be effective as of July 1, 1938, be and are hereby approved subject to the following conditions:

1. Approval of the contracts under consideration shall not be construed as constituting approval of any payments made thereunder in this or any other proceeding before this Commission.

2. With respect to any and all payments made to the Service Company, the petitioners shall, upon request of the Commission, furnish:

(a) Proof that the services performed were necessary and beneficial to the petitioners and were not available within petitioners' own organizations.

(b) Proof that the amount charged or paid for services is not in excess of the cost of equivalent services from sources other than the Service Company.

(c) Evidence of the cost to the Service Company of any service performed for or in behalf of petitioners.

3. Upon request of the Commission, the petitioners shall furnish or cause to be furnished to the Commission, reports of the Service Company to the Securities and Exchange Commission and other periodic statements of the Service Company showing in detail the nature and extent of all work performed directly for petitioners, and details of cost allocations used in assigning charges to holding company and operating company associates and groups of associates. Such statements shall list the groups of associates, the members thereof, and the basis of group classification.

4. Petitioners shall notify the Commission immediately of any changes or amendments in the contract or method of cost allocation which will appreciably affect the extent of the services or the cost or charges therefor furnished to the petitioners.

5. The Commission reserves jurisdiction to dissallow payments by petitioners for any services rendered or alleged to have been rendered by the Service Company unless the petitioners, after notice from the Commission, furnish or cause to be furnished free and ready access to the accounts and records of the Service Company for the purposes of audit and inspection by authorized members of the Commission's staff.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Wisconsin Michigan Power Company

[CA-1098, 2-WP-437.]

Public utilities, § 14 — Tests of status — Eminent domain rights — Submission to taxation — Judicial decision.

1. A power company, successor in title to a company which asserted its

status as a public utility and exercised the right of eminent domain as such and also made reports to the Commission and submitted to taxation, without any public body specifically deciding the status of the company when the issue as to such status was clearly raised, was held not to be a public utility under the provisions of Chap. 196, Statutes, following a decision by the state supreme court that the company was not a public utility within the meaning of the statutes relating to taxation, p. 213.

Consolidation, merger, and sale, § 13 — Property acquisition — Nonutility property — Necessity of consent.

2. No approval under the provisions of § 196.80, Statutes, is required for the consolidation of a dam and hydroelectric plant with the property of a power company when the property to be acquired is owned by a company which is not a public utility, p. 213.

Consolidation, merger, and sale, § 62 — Approval or disapproval — Issues presented — Possible acquisition by coöperatives.

3. No issue is before the Commission as to the comparative advantages of purchase of electric facilities by a public utility company on the one hand and by a coöperative organization on the other, in a proceeding by the company to obtain Commission approval of the acquisition, when the coöperative has no power of eminent domain to acquire the property, the coöperative is not subject to the jurisdiction of the Commission, the record is devoid of any showing of a commitment by the present owner to sell to the coöperative, and there is a mere suggestion that if the present acquisition cannot be approved the owner might be willing to sell to the coöperative, p. 214.

Consolidation, merger, and sale, § 25 — Approval or disapproval — Rights of customers of seller.

4. Consideration must be given to the interests of customers being served by an electric company, in determining whether the sale of its property to an electric utility company should be approved, since if these customers are to be left without service in the future, it is doubtful that public convenience and necessity is established for the acquisition, p. 215.

Service, § 117 — Duty to serve — Rights of customers — Coöperatives and municipalities.

5. Coöperatives and municipalities desiring service from a public utility holding itself out to serve the territory are to be considered as any other customer of that utility and as such are entitled to receive service, p. 215.

Accounting, § 13 — Original cost — Property purchased from nonutility.

6. An accounting rule that original cost as applied to utility plant means the cost of property to the person first devoting it to the public service should not be construed to apply to a public service other than that of a public utility; consequently, a power plant acquired by an electric utility from a nonutility company is not to be treated as property devoted to a public service prior to acquisition by the utility company, p. 216.

[October 31, 1939.]

RE WISCONSIN MICHIGAN POWER CO.

APPLICATION by electric power company for approval of addition of power plant of another company to its system and of the operation thereof, and for determination of proper entry in applicant's books of account, together with application for certificate of public convenience and nececssity; acquisition of property approved, certificate granted, and accounting prescribed.

By the COMMISSION: On May 9, 1939, Wisconsin Michigan Power Company applied to the Commission for its consent and approval of the addition of the Union Falls dam and hydroelectric plant of the Oconto River Power Company in Oconto Falls to its generating system and of the operation thereof, and for determination of the proper entry in applicant's books in Account No. 104. (CA–1098.) This application was made pursuant to the requirements of § 196.49, Statutes, and the Commission's general order in Docket 2–U–20. The application also contemplates that if the Commission should hold that the Oconto River Power Company is a public utility within the meaning of Chap. 196, Statutes, the approval of the consolidation be given under the provisions of § 196.80, Statutes.

On May 9, 1939, the Wisconsin Michigan Power Company filed an application for a certificate of public convenience and necessity authorizing the acquisition and use of the Union Falls dam and hydroelectric plant of the Oconto River Power Company on the Oconto river under the provisions of § 31.15, Statutes. (2–WP–437.) In the latter case, notice of hearing was given in accordance with the provisions of § 31.16 and proof of publication and mailing of notice as required by said section was made at the time of the hearings.

Hearings: June 14, June 28 before Examiner Samuel Bryan; July 6 before Examiner C. J. Jasper; and August 18, 1939, at Madison before Commissioner Robert A. Nixon.

APPEARANCES: Wisconsin Michigan Power Company, by James D. Shaw, Attorney, Milwaukee; Oconto River Power Company, by H. W. Eslein, Oconto Falls; Oconto Electric Coöperative, by Norris E. Maloney, Attorney, Madison; Floyd E. Wheeler, Attorney, Madison; Milton R. Mehlhouse, Attorney, Madison; Senator Michael Kresky, Green Bay (appearing as a friend of the coöperative). City of Oconto Falls, by E. J. Shellman, Mayor, W. J. Munsert and Edward N. Ama, members of council, Oconto Falls; George C. Berteau, Attorney, Madison.

Of the Commission staff: George P. Steinmetz, chief public service engineer; Ralph E. Purucker, engineering manager; E. W. Morehouse, director rates and research division; Warren Oakey, valuation engineer.

1. *Status of Oconto River Power Company*

[1, 2] The Oconto River Power Company is a successor in title of the Union Falls Power Company and the

Union Manufacturing Company. The Union Manufacturing Company asserted its status as a public utility and exercised the right of eminent domain as such (Union Mfg. Co. v. Spies (1923) 181 Wis 497, 195 NW 326). It also made reports to the Railroad Commission, predecessor of the Public Service Commission, and for a few years to the Public Service Commission, and submitted to taxation under the provisions of Chap. 76, Statutes, as a public utility. In the Spies Case, above cited, the issue was one unrelated to the question as to whether the operation of the applicant was actually such as to constitute it a public utility. The various activities of the Oconto River Power Company and its predecessors which indicated a claim of public utility status were generally engaged in without any public body specifically deciding the status of the company when the issue as to such status was clearly raised. On June 2, 1936, the supreme court handed down an opinion in Union Falls Power Co. v. Oconto Falls, 221 Wis 457, 265 NW 722, wherein it specifically held that this company is not a public utility within the meaning of Chap. 76, Statutes, relating to taxation. Since that date the Public Service Commission has declined to take jurisdiction of an application relating to the activities of said company holding that the same is not a public utility because of said supreme court decision. While the definition of a light, heat, and power company contained in § 76.02 (8), Statutes, is not identical with the definition of a public utility in § 196.01, Statutes, we adhere to our former decision to the effect that the decision of the supreme court above cited precludes classification of the Oconto River Power Company as a public utility under the provisions of Chap. 196, Statutes. It follows that no approval under the provisions of § 196.80, Statutes, is required.

2. Status of Coöperative

[3] The Oconto Electric Coöperative intervened in opposition to the application. The testimony shows that the coöperative now desires to purchase the plant in question and that it has obtained a promise of Federal aid in making such a purchase. It urges that in this proceeding the Commission must weigh the benefits to the public which would accrue by reason of the proposed purchase of this dam by the coöperative against the public benefits which would accrue by the proposed acquisition on the part of the Wisconsin Michigan Power Company. It is admitted that under the statutes the coöperative has no power of eminent domain to acquire such property against the will of the owner. It is further admitted that the coöperative is not subject to the jurisdiction of the Public Service Commission. The record is devoid of any showing which positively commits the present owner of the property to sell to the coöperative in the event that the present application of the Wisconsin Michigan Power Company should be denied. There is a mere suggestion that if the present acquisition cannot be approved the company might be willing to sell to the coöperative.

The coöperative was permitted to intervene and to present testimony and argument at length with the thought that such testimony and argument might have some bearing upon the is-

sues of public convenience and necessity which are before the Commission in this proceeding. To the extent that they bear upon those issues such testimony and argument have been given consideration. However, we are of the opinion that there is no issue before the Commission as to the comparative advantages of purchase by the applicant, on the one hand, and by the coöperative, on the other hand.

3. *Public Convenience and Necessity*

The only issue before the Commission in these proceedings is whether the proposed acquisition by the Wisconsin Michigan Power Company is required by public convenience and necessity.

It is deemed unnecessary to review in detail the technical testimony offered with respect to the advantages of interconnecting the plant in question with the electrical system of the applicant company. In general it was shown that while the plant as at present operated might in the future prove insufficient during low water periods to provide necessary firm power to supply the two customers now served such deficiency would be eliminated by connection with the applicant's system.

Because the applicant has access to large supplies of steam-generated power in addition to its hydroelectric power by reason of an operating agreement with the Wisconsin Electric Power Company, an affiliated company, it would be possible for it to utilize such available power during the off-peak periods so as to save the water power at the Oconto Falls plant for use during peak periods. This type of operation would apparently result in more dependable service and a more complete and efficient utilization of the power at the Oconto Falls dam. It was also shown that the proposed addition of this plant to the applicant's system would make unnecessary certain additions to plant which would otherwise be necessary in order properly to take care of the present and prospective load. The coöperative and the city of Oconto Falls are the customers now being served by the existing plant.

The applicant has indicated of record that no change resulting in an increase of rates is contemplated in the existing contract between the Oconto Falls Power Company and these customers. The evidence further indicates that these customers would have made available to them a more dependable supply of power for the present needs and for the possible increase in the use of power.

[4, 5] Some question has been raised as to the possibility of applicant declining to furnish energy to the municipality and the coöperative after the expiration of existing contracts. In determining the issue of public convenience and necessity, consideration must be given to the interests of the customers now being served by the Oconto River Power Company. If these customers are to be left without service in future, it is doubtful that public convenience and necessity is established for this acquisition. It has been our policy, and we so interpret the law, that coöperatives and municipalities desiring service from a public utility holding itself out to serve the territory are to be considered as any other customer of that utility and as such are entitled to receive serv-

ice. Consequently, in finding that the acquisition of the plant and property of the Oconto River Power Company by the applicant is required by public convenience and necessity, we consider that the two customers mentioned will be entitled to receive service in the future from the applicant. To hold otherwise would mean that two substantial customers—members of the public—might be materially injured by the consummation of this acquisition.

The city of Oconto Falls intervened but offered no testimony. The record indicates that the city's position with respect to possible acquisition of the plant in the future would be strengthened rather than weakened by the approval of the proposed acquisition inasmuch as this property would then assume public utility status and be subject to purchase by the municipality under the provisions of Chap. 197, Statutes, in addition to any existing right of purchase by voluntary agreement.

The proposed acquisition is to be at the price of $90,000 for the hydroelectric plant and also certain lands valued at $4,929 not necessary for the project. This price is materially less than the original cost of the property. The evidence and the independent investigation of the Commission's engineers indicate that this price is not excessive. No serious question was raised by the interveners as to the propriety of the purchase at the figure named. In fact it was indicated that the coöperative was ready to proceed with negotiations to purchase at a similar price. The evidence also indicates that the applicant is financially able to acquire and utilize the property for the purposes above indicated.

4. *Accounting Entries*

[6] Under definitions in the Uniform System of Accounts for Electric Utilities (Classes A and B), item 26 reads as follows: "'Original cost,' as applied to utility plant, means the cost of such property to the person first devoting it to public service."

The applicant claims that irrespective of whether or not the Oconto River Power Company is a public utility within the meaning of Chap. 196, Statutes, it is, and its predecessors were, devoting this property to a public use within the meaning of the above accounting rule since the dam was first placed in operation. In support of this claim it cites Wisconsin Traction, Light, Heat & P. Co. v. Green Bay & M. Canal Co. (1925) 188 Wis 54, 205 NW 551. It desires to show on its books the original cost of this property to its predecessor in title rather than the present purchase cost.

The entry of the original cost on the books of the applicant company with the proper adjustments which would be made under the Commission's system of accounts would not result in any different situation as to the valuation of this company's property for rate-making purposes than would exist if only the present purchase price of $90,000 should be entered. However, we are of the opinion that Par. 26 above quoted should not be construed to apply to a public service other than that of a public utility.

For example, if the company should acquire an old school building, the use of which had been discontinued by the

school board, to remodel for an office building, it is obvious that the entry of the original cost of that school building which was clearly devoted to a public service would have no material bearing or value in connection with regulation of public utility accounts.

Numerous other illustrations readily suggest themselves. We are of the opinion, therefore, that the plant and property subject to this acquisition proceeding were not devoted to a public service within the meaning of Par. 26 above quoted prior to acquisition under this proceeding.

Findings

The Commission finds:

1. That the proposed acquisition by the applicant of the Union Falls dam and the hydroelectric plant of the Oconto River Power Company and the interconnection of said plant with its electrical system will not substantially impair the efficiency of the service of such public utility; will not provide facilities unnecessarily in excess of the probable future requirements; and will not when placed in operation add to the cost of service without proportionately increasing the value or available quantity thereof.

2. That said acquisition and the use of such property in connection with the business of the applicant for the purposes and at the price set forth in the application would be a public convenience; that the applicant possesses the financial ability to utilize the property for such purposes; that public necessity requires such acquisition and use; and that the procedural conditions as to the contents of the application, notice of hearing, publication, and mailing of the same, etc., required by §§ 31.15, 31.16, and 31.17, Statutes, have been complied with.

3. That the Oconto River Power Company is not a public utility, and that said property will be first devoted to a public use within the meaning of the Uniform System of Accounts upon its acquisition by the applicant public utility.

COLORADO PUBLIC UTILITIES COMMISSION

Re F. C. Purvis

[Application No. 5159-PP, Decision No. 14294.]

Monopoly and competition, § 103 — Adequacy of existing service — Impairment of service — Burden of proof.

Lack of proof of inadequacy of existing carrier service alone would not justify the denial of an application for a certificate to operate, but it must appear that the efficiency of such common carrier operation will be impaired by the granting of such certificate, and such showing should be made by the protestants.

[November 10, 1939.]

COLORADO PUBLIC UTILITIES COMMISSION

APPLICATION *for permit to operate as a private carrier by motor vehicle for hire and motion made to dismiss application; application granted and motion denied.*

APPEARANCES: F. C. Purvis, Las Animas, pro se; John P. Beck, Denver, for the Colorado Trucking Association, Las Animas Transfer Company, Fowler Transportation Company, John Green, Joseph H. Lee, Silvers Truck Service, and Manzanola Transfer Company; Ray B. Danks, Denver, for the Motor Truck Common Carriers Association, Dallas Transfer and Storage Company, and Jackson Transfer and Storage Company; A. J. Fregeau, Denver, for Weicker Transportation Company.

By the COMMISSION: By the instant application, authority is sought to transport melons, loose hay, grain, and onions, from and to points within a radius of 25 miles of Las Animas, with occasional trips to Denver with melons.

The applicant stated that he was a farmer, and intended to continue to follow the farming business, but possessed a Ford truck and wanted to be in a position to use it, rendering a seasonal service transporting melons, loose hay, grain and onions, during the harvest season, only; that melons, grain, and onions moved from fields within a 25-mile radius of Las Animas to storage, loading points, and markets therein, and loose hay to feed lots and mills therein; that he proposed no town-to-town movement of any kind; that at the present time there was plenty of trucks to take care of any public demand in this territory; that he had no customers at this time and no need for a permit this year, but felt that in normal years—probably next year if they had a good crop—there would not be sufficient authorized carriers to meet the public demand. The applicant stated further that he knew of no complaint whatever being made of the service rendered by authorized carriers, but made this application in contemplation of the need arising, paid his $5 filing fee, and while, at the present time, he did not need the permit, he felt that he would like to go through with it, and if authority were granted, it would put him in a position to meet future demands when the same occurred.

The applicant being advised that inasmuch as he had no customers, and no need for the permit at the present time, it might be assuming some unnecessary burden to keep the permit in good standing even though it were granted. However, the applicant stated that the part of his application referring to occasional trips to Denver might be eliminated and the remaining portion of his application take the usual course.

At the conclusion of the applicant's testimony, John P. Beck moved that the application be dismissed, inasmuch as the applicant had no contracts with customers, no business in sight, and had made no showing to support the granting of the authority as sought, and further, that the applicant had acknowledged there was adequate carrier service available.

Mr. Beck's contention as to lack of proof of inadequacy of common car-

rier motor vehicle service, is correct, but such deficiency alone would not justify denial of this application. It must appear that the efficiency of such common carrier operations will be impaired by the granting of the authority sought, and usually that fact can best be established by protestants.

See Re Boller (1939) Application No. 4216–PP–B, Decision No. 13149; Re Logan (1939) Application No. 4886–PP, Decision No. 13151.

After a careful consideration of the record and the testimony given at the hearing, the Commission is of the opinion, and finds, that while the applicant herein has failed to show inadequacy of authorized carrier service to take care of the transportation needs as mentioned in his application, protestants failed to make any showing that to grant the authority sought would impair the service of present authorized carriers to a degree where they could not maintain the present efficient services, and without this showing, the motion to dismiss should be denied and the application granted.

ARKANSAS DEPARTMENT OF PUBLIC UTILITIES

Re Louisiana Nevada Transit Company

[Docket No. 333.]

Certificates of convenience and necessity, § 88 — Measure of necessity — Desire for service.

1. One measure of the convenience and necessity of a proposed utility service is the desire of the public for that service, p. 228.

Monopoly and competition, § 34 — Public interest — Factors considered.

2. The Commission, in passing upon an application for authority to furnish utility service in an area already being served, must decide the question of what is in the public interest on the circumstances existing at the time of the proposed competition, p. 232.

Monopoly and competition, § 48 — Effect of rate offer.

3. The offer of a gas company to meet competition by a company applying for authority to furnish service at lower rates should not alter the decision on the application, p. 232.

Monopoly and competition, § 40 — Effect of rate investigation — Stipulation as to refund.

4. Neither the pendency of an investigation of an existing gas company by the Commission nor the existence of a stipulation providing for refunds if rate reductions are established in the amount stipulated should affect the Commission's decision on an application by another company for authority to furnish service at lower rates, p. 232.

Security issues, § 99 — Capitalization — Bonds and stock.

5. A public utility without an earned income record should not be capitalized on a basis whereby only $1,000 is acquired through the issuance of common stock and $499,000 through mortgage notes, p. 233.

Security issues, § 99 — Financing plan — Fixed charges — Relation to total investment.

6. The financial plan of a public utility should be constructed so that its annual fixed charges of interest and amortization of its borrowed capital will not exceed 6 per cent of its total investment in its property, p. 233.

Return, § 101 — Reasonableness — Natural gas.

7. Estimated returns of from 12.4 per cent to 19.7 per cent on property of a natural gas company are far in excess of a fair rate of return, p. 235.

Certificates of convenience and necessity, § 73 — Conditions — Rate proposals — Refund of excess earnings.

8. A certificate of convenience and necessity authorizing construction and operation of a natural gas system under rate proposals which might produce excessive earnings, where the accuracy of estimated earnings has not yet been tested by experience, should contain the condition that the company shall refund to customers one-half of all earnings during the first year of operations which the Department may find to be in excess of a fair return, p. 235.

(MEHLBURGER, Commissioner, dissents.)

[December 22, 1939.]

APPLICATION *for certificate of convenience and necessity to construct and operate a natural gas pipe-line system and for approval of security issues; granted subject to conditions*

APPEARANCES: W. T. Anglin, and W. A. Delaney, Jr., for Louisiana Nevada Transit Company; William C. Fitzhugh, J. Merrick Moore, and James B. Henderson, for Arkansas Louisiana Gas Company; Ed F. McFaddin, and L. Carter Johnson, for city of Hope and Hope Brick Works.

Statement

By the COMMISSION: This case arises from an application of a newly organized natural gas corporation for a certificate of convenience and necessity to construct a natural gas transmission line and render a public utility service in an area in which another natural gas public utility operates. The applicant company has contracts to serve three large industrial customers which are now served by the existing gas utility. The new company offers to serve four towns not now receiving gas service and other customers accessible to its system. The applicant company proposes to serve at rates substantially lower than those prevailing at the time the application was filed.

The Louisiana Nevada Transit Company, a Nevada corporation, licensed to do business in the state of Arkansas, hereinafter referred to as the applicant company, filed with the Department on March 20, 1939, an application for a certificate of convenience and necessity to construct, maintain, and operate a natural gas pipe line from Cotton valley field in northern Louisiana to the Ideal Cement Company at Okay, Arkansas. This application described the proposed construction, the gas reserves available to the line, the rate at which the

cement company located at Okay was now being supplied and the rate proposed by the applicant company. The application included a copy of the articles of incorporation, specifications for the construction of the pipe line, copy of the contract for the construction of the pipe line, copy of the contract for the supply of gas, a description of the leases of the gas supplier in the Cotton valley field in Webster Parish, Louisiana, and an estimate of the cost of the line.

The Louisiana Nevada Transit Company also filed on March 20, 1939, an application for permission to execute a mortgage upon the property of the company. This application shows that the applicant company had entered into a contract with T. R. Jones, a pipeline contractor of Dallas, Texas, for the construction of its lines, gathering system and metering system, and that the contractor had agreed to deliver said system to the applicant company free and clear of all liens and encumbrances, except the mortgage mentioned above. It is proposed that mortgage notes will be executed for the payment of the property, details of which are to be found in the financial section of this order.

The Arkansas Louisiana Gas Company, hereinafter referred to as the Intervener Gas Company, filed on July 28, 1939, a petition of intervention to the application of the Louisiana Nevada Transit Company. This petition was allowed. The Intervener Gas Company states that it owns and operates an integrated natural gas system producing, transporting, and distributing natural gas in Arkansas, Louisiana, and Texas, and that the applicant company proposes to serve a part of the territory and industries now served by the Intervener Gas Company. The petitioner further denies the allegations in the application of the Louisiana Nevada Transit Company.

The applicant company filed on August 3, 1939, an amendment to its application of March 20, 1939, stating that since the filing of the original application the Federal Power Commission on July 18, 1939 (30 PUR (NS) 40), granted the applicant company a limited certificate of public convenience and necessity for the construction of its proposed line; that this certificate authorized the applicant company to construct a natural gas pipe line from the Cotton valley field, in Webster Parish, Louisiana, to Okay, in Howard county, Arkansas, and to the city of Hope, Arkansas; that the original application did not include an extension to the city of Hope, Arkansas, and that the need for the extension arises by reason of fuel contracts between the applicant company and the city of Hope, Arkansas, for its Municipal Light and Water Plant, and with the Hope Brick Works; that the applicant company will furnish natural gas to both parties at the same rate it proposes to furnish the cement company at Okay. The applicant company proposes additional construction of a 6-inch line from a point on its main line to the city of Hope, a distance of approximately 12 miles. The additional construction has been incorporated in the contract with T. R. Jones. The amended application contains a copy of the limited certificate granted by the Federal Power Commission, a copy of the contract with the city of Hope for its Water and Light Plant, a copy of the contract with the Hope

Brick Works, and an estimate of the cost of constructing the additional lines.

The applicant company also filed, on August 3, 1939, an amendment to its application to execute a mortgage. It is requested in the amendment that the cost of constructing the extension to Hope be included in the proposed original notes and mortgage, to be paid in the manner provided in the application of March 20, 1939.

The applicant company filed with the Federal Power Commission on January 2, 1939, an application for a certificate of convenience and necessity to construct, maintain, and operate a natural gas line from Cotton valley field to the Ideal Cement Company's plant at Okay, Arkansas. The Arkansas Louisiana Gas Company filed an intervention before the Federal Power Commission opposing the granting of the certificate. Hearings were held by the Federal Power Commission. This Department, while not a party to the proceedings, was represented during the entire hearing. The Federal Power Commission, on July 12, 1939, entered its order granting the applicant company a limited certificate of convenience and necessity. The Department, upon receipt of a copy of this order, notified the applicant company, the Arkansas Louisiana Gas Company, the Ideal Cement Company, the mayors of Hope, Saratoga, Fulton, Bradley, and the community of McNab, Arkansas, that a hearing would be held in the offices of the Department on August 7, 1939, in regard to the application. The hearing was begun on August 7th and continued from that date through August 15, 1939. At the conclusion of the hearing the Department heard oral argument. Briefs were filed by the applicant company, the Intervener Gas Company, the city of Hope, and the Hope Brick Works.

Prior to the date of hearing the applicant company and the Intervener Gas Company filed on July 29, 1939, a stipulation agreeing that the transcript of testimony and exhibits submitted before the Federal Power Commission be made a part of the record before this Department.

The city of Hope, on August 5, 1939, and the Hope Brick Works, on August 7, 1939, filed petitions to intervene. These petitions were allowed.

A copy of the transcript, including the exhibits presented before the Federal Power Commission, was introduced by reference and made a part of the record before the Department. The agreement to incorporate the Federal Power Commission record did not prevent either of the parties from recalling witnesses who testified before that Commission. It was also agreed that objections raised to the statements of witnesses, exhibits or other matters before the Federal Power Commission, should be considered by the Department, but should be passed on with reference to the Arkansas law rather than the Natural Gas Act which governed the Federal Power Commission hearing.

The Department in the hearing requested, without objection from the Intervener Gas Company, several additional exhibits from the applicant company, to be filed within a reasonable time after the hearing. In response to this request Applicant's Exhibits 65 and 66 were filed on Septem-

ber 4, 1939, and 67, 68, 69, and 70 were filed on October 24, 1939.

The Department, with the consent of all parties to the hearing, stated that it would direct its engineering division to have tests made of the B.T.U. content of gas from the Cotton valley field and from the lines of the Intervener Gas Company. These tests were completed after the taking of testimony in this case. The engineering report, dated October 16, 1939, on these tests was sent to all parties to this case.

This order contains a majority and a minority opinion. The Commissioners believed that although they were unable to agree in the opinion, they should agree on a statement of the facts as presented in this case. The following statement has been agreed upon:

Facts

Parties to the Case

(A) The Louisiana Nevada Transit Company is authorized in its articles of incorporation, executed December 8, 1938, to engage in all activities necessary and incident to the production, purchase, transportation, and distribution of natural gas, as well as other activities not necessary to consider in this order. The total amount of authorized capital stock of the corporation is one thousand shares without par value. Directors of the corporation are J. O. Hensler, J. H. McClure, and Vernon Roberts, all of Ada, Oklahoma. The capital stock is nonassignable and nonassessable and the articles of incorporation cannot be amended in this particular.

(B) The Arkansas Louisiana Gas Company is a corporation organized under the laws of the state of Delaware, authorized to do and doing business in the states of Arkansas, Louisiana, and Texas with its principal operating office in Shreveport, Louisiana. The company owns and operates an integrated natural gas system producing, transporting, and distributing natural gas through a pipe-line system in excess of 1,500 miles of main line, serving 62 communities with approximately 44,000 consumers in the state of Arkansas, 23 communities with approximately 28,000 consumers in the state of Louisiana, and 18 communities with approximately 8,000 consumers in the state of Texas. The company also serves from its main transmission lines 246 industrial consumers in the state of Arkansas, 82 industrial consumers in the state of Louisiana, and 102 industrial consumers in the state of Texas. In 1938, the company sold 38,358,385 thousand cubic feet of gas from its entire system, 22,394,939 thousand cubic feet of which were sold in Arkansas. The total system revenue was approximately $8,150,000 of which $4,856,000 originated in Arkansas. The company is at the present time rendering natural gas service to the three industrial consumers sought to be served by the Louisiana Nevada Transit Company. At no time during the hearing was any question raised as to the adequacy of the Intervener Company's gas reserves or of the adequacy of its service to the customers proposed to be served by applicant company.

(C) The city of Hope, with a population of approximately 6,000, is the county seat of Hempstead county. The city operates an electric and water plant and also sells electricity in a small area adjacent to the city. The city

uses natural gas, purchased from the Arkansas Louisiana Gas Company, for steam generation in its power plant.

(D) The Hope Brick Works, owned and operated by N. P. O'Neal, is engaged in the manufacture of brick, and in the process of this manufacture uses gas purchased from the Arkansas Louisiana Gas Company. Its plant is located outside of the corporate limits of the city of Hope, but is served with gas by an extension from the city distribution system. The Department's jurisdiction to regulate rates for gas to both the Hope Light and Water Company and the Hope Brick Works is not contested by the Arkansas Louisiana Gas Company.

[Further statement of facts is omitted for lack of space. The material facts upon which the regulatory rulings are based are sufficiently summarized in the opinions of the Commissioners. The omitted statement discusses the exhibits and testimony relating to the source of supply, proposed construction, estimated cost of proposed construction, period of construction, proposed capital structure and financing, industrial customers proposed to be served, municipal customers to be served, estimated operating revenues and expenses, company's ability to serve, rate proposals, negotiations for renewal of a contract with an industrial customer, and other matters.]

Opinion

FITZHUGH, Chairman: The Louisiana Nevada Transit Company has filed an application for a certificate of convenience and necessity to render natural gas public utility service in a territory in which another natural gas public utility, the Arkansas Louisiana Gas Company, operates.

The applicant company proposes to render a general public utility service in the area in which it seeks to serve. It has contracts to serve the Ideal Cement Company, the Hope Brick Works, and the Hope Municipal Light and Water Company at rates substantially lower than these industries are now receiving from the Arkansas Louisiana Gas Company. It offers to serve the towns of Fulton, Saratoga, McNab, and Bradley at rates much lower than rates of the Arkansas Louisiana Gas Company to similar communities. It also offers to serve, with the approval of the proper regulatory authorities, any other customers desiring service in the territory through which it proposes to build its lines.

The question presented in this case is whether public convenience and necessity warrant the granting of this certificate. The Arkansas Louisiana Gas Company opposes the granting of this certificate. Before determining what consideration should be given the arguments of the Intervener Gas Company, it is proper to analyze the application of the applicant company to determine whether public convenience and necessity warrant the granting of the certificate.

The applicant company has attempted to justify the granting of its application on the grounds that it has a sufficient supply of gas available to meet the requirements of its proposed customers; that it will construct properly the necessary gathering, transmission, and distribution facilities, adequate for the requirements of its customers; that it has the managerial ability to

operate properly a public utility; that it will deliver natural gas that is safe for public use; that it will be financed adequately; and that it will sell natural gas at reasonable rates and that there is a public desire for its service.

These claims are analyzed in the following sections to determine whether the application should be granted.

Supply of Gas

The applicant company has a contract to purchase its gas from the Cotton valley field in Webster Parish, in northern Louisiana. A geologist witness for the applicant company estimated that as of January 1, 1939, the ultimate available gas reserves of this field were in excess of 1,220,000,000 thousand cubic feet. The geologist of the Intervener Gas Company admitted that in his opinion this estimate was "correct and conservative."

The applicant company's contract for its supply of gas is with the Oliphant Oil Company. The Oliphant Oil Company owns acreage with an estimated reserve of 142,500,000 thousand cubic feet in the Cotton valley field. This contract is for a period of ten years. During the first five years of the contract the applicant company will pay 3 cents per thousand cubic feet for the gas it purchases up to 6,000,000 cubic feet per day. Should the requirements of the applicant company exceed this amount, then the price for additional gas is to be fixed by the contracting parties and if an agreement cannot be reached, the applicant company shall have the right to purchase excess gas from others. The contract terminates on August 1, 1944, unless the parties agree upon the price to be paid during the remaining 5-year period. If the parties are unable to agree on a price, the applicant company by paying or tendering to the Oliphant Oil Company the average posted market price for natural gas being paid by the major purchasers in this field may secure its supply of gas for an additional five years.

Four other large oil and gas producing companies holding acreage in this field and in near-by fields have communicated with the applicant company, stating that they would negotiate contracts to sell natural gas to the applicant company.

In the opinion of the Department there is an adequate supply of gas available to the applicant company in the Cotton valley field. However, there is conflicting testimony on the availability of gas if this field is unitized and a recycling program adopted.

Witnesses for the applicant company stated that in their opinion, if this field were unitized, it would give the applicant company a greater gas supply. A representative of the Oliphant Oil Company stated that this statement is necessarily true because the Oliphant Oil Company will not enter into a unitization agreement unless all the operators in the field agreed to carry out its contract with the applicant company. This witness stated that about 85 per cent of the operators in this field had agreed to a unitization contract which gives priority to their contract with the applicant company. Witnesses of the Intervener Gas Company contend there will not be sufficient gas available to meet the contract requirements of the applicant company if the field is unitized and gas recycled. The proposed contract for unitization of the Cotton valley field

introduced by a witness for the Intervener Gas Company carries little weight in supporting their contention of the lack of availability of gas to the applicant company in this field. This proposed contract is what they termed the most recent development attempting to work out the difficulties as between the operators in the Cotton valley field. It is an entirely different type of agreement from the one which the witness for the applicant company testified had been entered into by 85 per cent of the operators.

There is doubt as to whether or not this field will be unitized. It is the opinion of the Department that it is not necessary to determine if the applicant company will benefit through unitization but to determine if a sufficient supply of gas is available to meet its requirements. The conclusion is reached, after careful study of all the facts, that there is an adequate supply of gas in the Cotton valley field available to the applicant company to meet its requirements with or without unitization.

Construction of Gas System

The applicant company has furnished detailed information on the type and the estimated cost of construction. The T. R. Jones Construction Company has entered into a contract to build the necessary gathering, transmission, and distribution lines of the applicant company. This construction company has had many years experience in this type of work and has fulfilled contracts for pipe-line construction totaling millions of dollars. No question has been raised as to the ability of the T. R. Jones Construction Company to construct adequately the necessary gas system.

The 8-5/8-inch main transmission line to Okay and the lateral transmission line to Hope will have sufficient capacity to meet the requirements of the present and prospective customers of the applicant company.

It is the opinion of the Department that the lines will be constructed in accordance with modern engineering practices and will have the capacity necessary to supply the present and prospective customers with adequate gas.

Management of the Company

The stockholders of the applicant company are Boettcher interests, T. R. Jones, W. A. Delaney, Jr., and wife, and M. O. Matthews and wife. These stockholders will be responsible for the management of the company. All of these men have had many years of business experience and have operated their other business enterprises successfully. T. R. Jones is recognized by all parties to this proceeding as a competent pipe-line contractor. He testified that he has had a great deal of experience in building pipe lines for others and is anxious to build one in which he will have an equity. The ability of the organizers of this company to purchase pipe at advantageous prices is indicative of their general managerial ability. The majority opinion recognizes that those in charge of this company have the ability to manage this public utility themselves or will employ competent management.

Safety of Gas

The applicant company's contract

with the Oliphant Oil Company provides for the purchase of gas at the well-head. It is believed generally by all witnesses that this will be what is termed "wet gas" and that it is desirable if not necessary to remove some of the condensate from the natural gas before transporting and selling it. Witnesses for the applicant company stated that they believed that the use of scrubbers and drips will be sufficient to make the gas safe for all types of consumption but agreed that should the use of scrubbers and drips not be adequate to make it safe, the applicant company will take whatever steps are necessary in order to furnish safe gas.

The Intervener Gas Company contends that the Cotton valley gas is sufficiently wet to produce a hazard to consumers, and the installation of scrubbers and drips along the transmission line will not make this gas safe for domestic and commercial use and that it may not be safe for industrial use.

A gasoline extraction plant is now in operation in the Cotton valley field. The record is not clear as to whether this existing gasoline extraction plant will be available to process the gas purchased by the applicant company from the Oliphant Oil Company. In any event, the Department will require the applicant company, as it requires other natural gas companies operating in this state, to supply gas that is safe for domestic, commercial and industrial use. We think that it is not necessary at this time to determine what particular type of equipment is essential in order to make the gas safe. The applicant company will be required either to purchase safe gas, have the gas processed so that it is safe, or install the necessary equipment to make it safe.

Capital Structure and Financing

The financial plan first proposed by the applicant company is not satisfactory for several reasons. The stockholders of the company, T. R. Jones, the Boettcher interests, W. A. Delaney, Jr., and M. O. Matthews, agreed that they would meet the requirements of this Department in financing the company. The combined resources of these stockholders totals several million dollars and there is undisputed testimony as to their ability to finance adequately this company. The capital structure and financing that will be required by this Department is explained in detail in another section of this order.

Reasonableness of Rate

The applicant company has contracts to serve the Ideal Cement Company at Okay and the Hope Brick Works and Hope Municipal Light and Water Company in Hope, Arkansas. The cement company employs approximately 150 men and is the second largest consumer of natural gas in this state. It has been using natural gas purchased from the Intervener Gas Company for more than nine years. The Hope Brick Works was one of the first industrial customers of the Intervener Gas Company and has been using gas since about 1911. The Hope Brick Works filed an intervention asking this Department to grant the applicant company a certificate of convenience and necessity.

The city of Hope also filed an intervention asking that the certificate be granted to the applicant company.

The city is under contract to purchase gas from the applicant company to be used as fuel in their municipally owned light and water plant, at the expiration of their present contract with the Intervener Gas Company. The savings that will be effected by reducing the cost of fuel will be beneficial to the residents of Hope, either through increasing the revenues of their municipal plant or decreasing the electric rates to consumers. The city of Hope also stated that it contemplates purchasing the natural gas distribution system in the city of Hope now owned by the Intervener Gas Company and, in the event such a purchase is consummated, it contemplates buying its gas from the applicant company.

The applicant company also offers to serve four small communities in southwest Arkansas. While the Department believes that the applicant company's exhibits purporting to show the cost of service in these four communities have not been accurately compiled, it is of the opinion that gas service can be given to these towns which will add to the public convenience and necessity.

The Federal Power Commission order granting the certificate to the applicant company further requires that the applicant company shall connect and sell gas from its pipe line to any person, municipality, or community legally authorized to engage in the local distribution of gas to the public. The rate for such service at the pipe line is established in the Federal Power Commission order as 10 cents per thousand cubic feet.

The rates offered by the applicant company to industrial, domestic, and commercial consumers in the area in which it proposes to serve are much lower than existing rates in that area. The reasonableness of the rates proposed by the applicant company will be treated in more detail elsewhere in this order. The applicant company has filed with the Department detailed cost of materials. This information indicates that the applicant company has purchased its materials at very favorable prices to it and that it has entered into construction contracts at fair prices.

The fact that the gas consumers in this area who appeared before the Department testified that they were anxious to have the certificate issued on rates offered by the applicant company is further evidence that those rates are more reasonable than rates prevailing in this area.

Desire of the Public for Service of the Applicant Company

[1] One measure of the convenience and necessity of a proposed service is the desire of the public for that service. Witnesses representing the chamber of commerce of the city of Hope, the towns of Bradley, Fulton, Saratoga, and McNab testified that their communities requested the Department to grant the application. The secretary of the chamber of commerce of Hope testified that in his opinion a lower gas rate would be beneficial to the city of Hope by attracting new industries and giving added employment. He stated the people of the city of Hope wanted the certificate granted. The statements of the other witnesses from these communities indicate that there is a widespread public desire for the granting of the certifi-

cate and that there was no apparent opposition from the public.

The three industrial customers to be served by the applicant company if the certificate is granted have expressed vigorously their dissatisfaction with the rates charged them by the Intervener Gas Company. They have expressed by interventions and by witnesses in this case a request that the certificate be granted.

Argument of Arkansas Louisiana Gas Company for Denying Application

The Arkansas Louisiana Gas Company is a large integrated natural gas public utility, producing, transporting, and distributing natural gas through a pipe-line system with an excess of 1,500 miles of main line, serving 103 communities and approximately 80,000 consumers in Arkansas, Louisiana, and Texas. The company also serves from its main transmission lines several hundred industrial consumers in these states. The total system revenue in 1938 was approximately $8,150,000, of which $4,856,000 originated in Arkansas.

The Arkansas Louisiana Gas Company has attempted to justify the denial of the application on the grounds that there is an uncertainty of the applicant company's gas supply; that the gas which the applicant company proposes to distribute is not safe, due to its wetness; that the present and past service of the Intervener Gas Company is adequate; that the Intervener Gas Company attempted to negotiate a contract with the Ideal Cement Company at lower rates; that the Intervener Gas Company's method of determining industrial rates is beneficial to domestic and commercial customers; that it offered to meet this or any other competition and that public convenience and necessity does not warrant the granting of the application.

These claims are analyzed in the following sections to determine what effect, if any, they have on the application.

Supply and Safety of Gas

The Department in a preceding section reached the conclusion that there is an adequate supply of gas in the Cotton valley field available to the applicant company to meet its requirements with or without unitization. The Department will require the applicant company to deliver to its customers gas that is safe for domestic, commercial, and industrial use.

Service of Intervener Gas Company

It is admitted that the service of the Intervener Gas Company is now and has been satisfactory. The complaint is against their rates.

Attempt to Negotiate Renewal Contract with Ideal Cement Company

There is conflicting testimony on what negotiations transpired between the Ideal Cement Company and the Intervener Gas Company prior to the cement company's contract with the applicant company. Witnesses for the applicant company testified that they attempted to secure a 10-cent rate from the Intervener Gas Company and were unable to do so. They further testified that the Intervener Gas Company had not, prior to the filing of the petition of the applicant company, offered a rate as low as 10 cents per thousand cubic feet, based on present consumption, to the cement com-

pany. The Department believes that it is not important to the decision in this case to determine whether the cement company permitted the Intervener Gas Company to offer new rates after signing a contract with the applicant company. The Department is of the opinion that the cement company exhausted every reasonable effort without success, to effectuate a new contract at a rate comparable to that contracted with the applicant company. The Department believes that no action of the Ideal Cement Company during the attempted negotiations of a contract with the Intervener Gas Company are prejudicial to a decision on the petition of the applicant company.

Intervener Gas Company's Method of Determining Industrial Rates

The Intervener Gas Company contends that its methods of determining rates to industrial customers are beneficial to its domestic and commercial customers. It stated that in making contracts with industrial customers "we strive to make a rate that will encourage the industrial consumer to enlarge his business and that will insure his connection to our pipe-line system for as long a period as possible."

The Intervener Gas Company's theory of rate making appears to be that it is justified in charging the industrial customers what the traffic will bear in order to serve the domestic and commercial customers, whom it terms "preferred," at lower rates. In establishing industrial rates it was stated that the Intervener Gas Company also considered competitive fuel costs and that the cost of oil or coal to the cement company would be higher than the rate it has been paying for natural gas.

Witnesses for the Intervener Gas Company stated that their company, being an integrated system with a large number of industrial, domestic, and commercial customers, has a distinct advantage over a small independent company. The industrial gas engineer of the Intervener Gas Company, who has charge of negotiating industrial contracts, testified that the Intervener Gas Company will have lower operating costs per thousand cubic feet of gas sold than a smaller company; that it will have lower costs per thousand cubic feet per mile transported because of the larger transmission line; that it will have a better diversity factor than a smaller company because of the many industrial and other customers served by the line; that it will have a better load factor because its diversity factor is better; and that, in his opinion, his company could sell gas cheaper than the applicant company.

Exhibits have been introduced showing the total Arkansas pipe-line industrial revenue to have increased from $730,347.72 in 1933 to $1,316,984.34 in 1937, and that city distribution system industrial revenues have increased from $428,589.52 in 1933 to $796,991.32 in 1937.

The chief accountant of the Department of Public Utilities testified that during this period of increased revenues rate reductions were "insignificant compared with the total revenue of the gas company."

The applicant company proposes to serve three industrial customers under contract to them at a flat rate of 10 cents per thousand cubic feet. The Intervener Gas Company has been

charging these same three customers, based upon the billings for consumption in the year 1938, an average of 14.25 cents for the cement plant, 16.68 cents for the Hope light and water plant and 15.98 cents for the Hope Brick Works. The applicant company offers to serve other industrial plants that will connect to its proposed pipe line at a flat rate of 10 cents.

The applicant company offers to serve the towns of Saratoga, Fulton, McNab, and Bradley at a flat rate of 45 cents per thousand cubic feet for domestic customers and 22 cents per thousand cubic feet for commercial customers. No minimum bill or other charge will be added to these rates. The Intervener Gas Company's domestic and commercial rate in the town of Okay, which town is comparable in size to the towns proposed to be served by the applicant company, is $2 for the first thousand cubic feet, or fraction thereof, and 50 cents for each additional thousand cubic feet, with a minimum bill of $1 when no gas is used. The domestic and commercial rate of the Intervener Gas Company in towns near those proposed to be served by the applicant company is as follows:

	Per M cu. ft.
First M cu ft. or fraction per month ..	$1.50
Next 4 M cu. ft. per month	.60
Next 95 M cu. ft. per month	.50
Next 400 M cu. ft. per month	.35
All over 500 M cu. ft. per month	.25

Minimum charge of $1.50 per month.

All industrial, domestic, and commercial rates now available to natural gas consumers in the immediate territory proposed to be served by the applicant company are substantially higher than similar classifications of service offered by the applicant company.

To summarize, the Intervener Gas Company contends that it can sell gas cheaper than the applicant company; that its policy of charging industrial consumers what the traffic will bear is beneficial to the domestic and commercial consumers, in that such a policy makes for lower rates for these customers. The facts are that the rates of the Intervener Gas Company to the three industrial customers under contract with the applicant company are approximately 50 per cent higher than the rates of the applicant company, and the rates of the Intervener Gas Company to domestic and commercial customers are substantially higher than the rates offered by the applicant company. The disparity between the rates of the two companies will be increased when consideration is given to the fact that the B.T.U. content or heating value of the Cotton valley gas is higher than the heating value of the gas sold by the Intervener Gas Company. This disparity will be increased further if the estimated net income of the applicant company is accurate because the Department will require a reduction in the 10 cents per thousand cubic feet rate to its industrial customers. These facts constitute the strongest indictment against the reasonableness of the present rates of the Intervener Gas Company.

The industrial revenue of the Intervener Gas Company increased over $955,000 or 82.4 per cent in the period 1933 to 1937, both inclusive. The reductions in rates to its domestic and commercial consumers during this period were practically negligible. This fact of the Intervener Gas Company's failing to make rate reductions to domestic and commercial consumers as

their industrial business increased speaks so loudly that it is difficult to hear their argument in theory.

Further evidence of the failure of the Intervener Gas Company to offer reasonable rates to consumers is furnished in the statement by the industrial engineer that in his opinion a 10-cent rate to the Ideal Cement Company is a fair rate. The present contract between the cement company and the Intervener Gas Company expires in August, 1939. The Intervener Gas Company proposes to serve the cement company after expiration of this contract and during the pendency of this application at the old rate of approximately 14¼ cents. The industrial engineer stated that he would be willing to recommend a 10-cent rate to the management of his company as being a fair rate but stated that the management of the company would determine the rate.

Offer to Meet Competition

[2, 3] The Intervener Gas Company, at the conclusion of the hearing, offered to meet the rates proposed by the applicant company to the three industrial customers, provided, however, that the Department would protect it from claims of discrimination or undue preference.

The question of what is in the public interest must be decided in each case on the circumstances existing at the time of the threatened competition. This eleventh hour offer of the Intervener Gas Company to meet this threatened competition appears to be an admission that the rates charged these three industrial customers are too high and that it is attempting, with the cloak of Commission approval, to remove this competition and to continue its policy of charging what the traffic will bear to other industrial consumers.

To deny the application on the grounds that the Intervener Gas Company now offers to meet the competition would give added incentive to this utility to keep its territory and rates without fear of competition, secure in the knowledge that should competition be threatened it can eliminate it by reducing its rates where competition arises. No new utility, under such a policy, would have an incentive to apply for permission to serve in the territory of the Intervener Gas Company. The Department, therefore, concludes that the offer of the Intervener Gas Company to meet this competition should not alter the decision on the application.

The Department hopes further to give added incentive to utilities to furnish to their consumers adequate service at rates to which they are in justice entitled, with the knowledge that when this is done protection against competition will be afforded.

The Department believes that public utilities have a responsibility to provide adequate service at reasonable rates with or without regulation.

Department's Investigation of the Intervener Gas Company

[4] The Department is now conducting a complete system-wide investigation of the Intervener Gas Company. The Department is of the opinion that the pendency of this investigation should not affect its decision in this case.

Stipulation between the Department and the Intervener Gas Company

The Department and the Intervener Gas Company on February 12, 1938, entered into a stipulation providing for refunds from January 1, 1938, to be made to its consumers in the event the Department is able to establish rate reductions in the amount stipulated. Should the Department establish these rate reductions it will mean that consumers will secure refunds during the period covered by the stipulation and that therefore the rates they are now paying will be reduced by the amount recovered under the stipulation. The Department believes that public convenience and necessity does not warrant the denying of this application because of the existence of the stipulation.

Effect on Other Customers

The Intervener Gas Company contends that to grant the application would require the Department to increase rates to the remaining customers on its lines in order to compensate for the revenue that would be lost. This contention is based on the conclusion that the Intervener Gas Company will continue to be entitled to a fair return on the fair value of its property necessary to serve these three industrial customers. The Department is not now determining what consideration should be given in a rate case to the loss of this business.

In the opinion of the Department there is an inconsistency in this argument of the Intervener Gas Company. A witness for the Intervener Gas Company stated that the customers of his company were in no way responsible for the loss of this business and at the same time the Intervener Gas Company contends that the result of the loss of this business should be passed on to its customers in the form of higher rates.

This argument of the Intervener Gas Company that the loss of this business will increase rates to domestic and commercial consumers is evidently predicated upon the belief that there is little opportunity to recover this loss by securing new business. To acquiesce in such a supposition would assume that the market for gas in this area is practically saturated. Evidence in the record indicated that there is opportunity for the development of new gas business in this territory. It is the opinion of the Department that the Intervener Gas Company has the opportunity to secure added revenue from new business which is available in this area to offset the loss of revenue from the three industrial customers.

Higher B.T.U. Content of Cotton Valley Gas

The applicant company proposes to sell gas having approximately 1,105 net B.T.U. value compared to approximately 936 net B.T.U. value of gas being sold by the Intervener Gas Company. This means that the Intervener Gas Company would have to sell its gas at a price below 9 cents per thousand cubic feet to deliver to consumers the same heating value as the 10 cents per thousand cubic feet gas offered by the applicant company.

Capital Structure and Financing

[5, 6] The financial plan first proposed by the applicant company is not

satisfactory to the Department for several reasons. The capital outlay of the applicant company, including working capital, when its gas system is completed will be approximately $500,000. The applicant company proposes to raise $1,000 of its capital by the sale of 1,000 shares of common stock. The remainder of its capital, approximately $499,000, it proposes to raise by the sale, to two of the stockholders, of notes secured by a mortgage on the property. These two stockholders are to construct the pipeline system, supply the necessary working capital, and take mortgage notes secured by the property. The proprietors of the applicant company are supplying $1,000, and the creditors $499,000 of the company's capital. The Department believes that it is not sound financial policy for a new company to borrow such a large part of its capital. Borrowed capital, to the extent indicated, would place a heavy burden in the form of fixed charges upon the company. This burden must necessarily be met out of operations. The applicant company is a new organization without an established earning record, consequently it is unwise to place a burden as proposed against anticipated but unproven earnings. It is recognized to be sounder financing to have a "cushion" against the probable earnings of a new company and this "cushion" is best provided by proprietary equity in the form of capital stock that will not place a fixed burden on the earnings of the company.

The applicant company is a public utility, consequently it must subject itself to the well-established principle of a fair return on a fair value of its property. The cost of its property (including its working capital), which is estimated to be approximately $500,000, is a fair measure of its value. If 6 per cent were a fair rate of return the amount of a fair return after all legal operating expenses are met would be approximately $30,000 annually.

The applicant company, in its first proposed financial plan, agreed to pay $50,000 annually on mortgage notes for the first four years. These annual payments are in excess of a fair return from which such payments can be made. In addition, the interest on the borrowed funds must also be met from the same fair return. The principal and interest due in the fifth year would be in excess of $300,000. It can be seen that the fixed costs to be met by the applicant company under its proposed financial plan exceed the funds which will be available for such charges.

The applicant company agreed in the hearing to modify its financial plan to meet the requirements of the Department. The Department is of the opinion that the financial plan of the applicant company should be revised so that its annual fixed charges of interest and amortization of its borrowed capital will not exceed 6 per cent of its total investment in its property or approximately $30,000 annually. This can be accomplished by reducing the amount of borrowed capital and extending the period of amortization for a longer period than five years. The Department believes that both the amount of capital borrowed should be materially reduced and the period of amortization lengthened.

The Department shall direct the ap-

plicant company to file within thirty days after the date of this order a new financial plan for its approval. The financial plan shall conform to the views of the Department set out in this order.

Fair Return

[7, 8] The applicant company furnished exhibits showing prospective earnings for the first five years of operations. The information in these exhibits has been restated and analyzed in tables contained in the statement of facts of this order. The net operating revenue available for return as shown in these tables is $62,390 for 1940, $68,603 for 1941, $98,528 for 1942, $97,967 for 1943, and $97,405 for 1944. If these amounts were actually realized, the percentages of return on a total estimated value of $500,000 would be 12.4 per cent for 1940, 13.7 per cent for 1941, 19.7 per cent for 1942, 19.6 per cent for 1943, and 19.5 per cent for 1944. It is obvious these estimated returns are far in excess of a fair rate of return that should be allowed by the Department.

The applicant company has not begun operations and as a result the accuracy of its estimated earnings has not been tested by experience. Operating revenues of the company can be estimated with a greater degree of accuracy than operating expenses due to the known records of gas consumption by the three large industrial gas consumers. Actual operating expenses may vary from the estimates which in turn would change the amount available for return.

If it were known definitely that the applicant company would earn the amounts set out in their exhibits the Department would be justified in requiring the company to reduce their rates below those proposed. The Department believes that, since the applicant company's rates are much lower than the rates now being paid by its prospective customers, and also since the company has not had operating experience to test the accuracy of its operating estimates, it is better policy and in the public interest to permit the applicant company to operate one year at its proposed rates. The Department will audit the records of the company at the end of the year to determine the amount of earnings available for return. The Department believes that if any earnings are made during the first year of operations in excess of a fair return on a fair value of the property, these excess earnings should be divided equally between the company and its customers. The Department, in this order, will grant the applicant company a certificate conditioned upon the basis of refunding to its customers one-half of all earnings during the first year of operations which the Department may find to be in excess of a fair return. The method of refunding, if any, shall be determined by the Department at the time of refunding.

Telegram Advising Opinion

The Department on September 13, 1939, advised all parties to this case as follows:

"Commissioner Blalock and I will issue an order granting the Louisiana Nevada Transit Company a certificate to construct, maintain, and operate the gas lines proposed in Docket No. 333. Commissioner Mehlburger will dis-

sent from the order and issue a minority opinion rejecting the application.

"The majority opinion will revise proposed financial structure. The initial contract rate of 10 cents will be approved subject to Commission review and may be limited to require setting up a sinking fund for reimbursement to consumers of all or part of earnings, if any, found to be above fair return.

"Applicant may be required to serve Saratoga, Fulton, Bradley, and McNab, and build feasible extensions.

"This unusual procedure of notifying parties of the Commission's decision prior to issuance of the order is taken in the public interest so that applicant may secure pipe and other purchases under existing commitments rather than run the risk of increased material costs.

"The opinions are in process of preparation.

"Ark. Dept. of Public Utilities
"Thomas Fitzhugh, Chairman"

Certificate Shall Be Issued

The Department is of the opinion that public convenience and necessity warrant the granting of the certificate in conformity with the opinion in this order. The Department is of the opinion that the applicant company should be financed in conformity with the opinion in this order.

MEHLBURGER, Commissioner, dissenting: After careful review of the facts in this case and the majority opinion, I find it impossible to concur in that opinion. It is evident to me from the record that public convenience and necessity warrant the denial rather than the granting of a certificate to the applicant company. In my opinion the application should be denied.

Reasons for Denying Application

1. The benefits to the three industrial customers proposed to be served and the approximately 300 prospective domestic and commercial consumers to whom service was offered by the applicant company, though now not assured service by the order granting the application, are insignificant when compared with the detrimental effects on the 44,000 other customers served by the system of the Intervener Gas Company in Arkansas.

2. The granting of the application will have a detrimental effect on the public in that it will result in needless and wasteful duplication of facilities.

3. The applicant company has not proved convenience and necessity by showing the present service of the Intervener Gas Company to be inadequate or unsatisfactory from the standpoint of:

(1) Source of supply;
(2) Character of gas;
(3) Facilities to serve;
(4) Ability to finance and operate.

4. Evidence sufficient to prove that the rates of the Intervener Gas Company are excessive was not presented at the hearing. Any finding that such rates are excessive should have resulted in an order to the company to reduce its rates accordingly.

5. The rates at which the applicant company proposes to serve the domestic and commercial consumers in the four towns of Bradley, McNab, Fulton, and Saratoga have not been found to be adequate. These rates, in my opinion, under the conditions of service, are inadequate unless it is recog-

nized that the revenue from industrial customers should rightly carry a part of the costs for these two classifications of service.

6. The effect on the other customers of the system of the Intervener Gas Company in the state of Arkansas will be materially detrimental because:

(a) It will result ultimately in a higher rate to these customers due to the decrease in the amount of reduction which may be obtained by the Department.

(b) It may have an undesirable effect upon the rate of return which may be established for the Intervener Gas Company in the present investigation.

(c) It will materially affect the amount of refunds to be obtained by the terms of the Department's stipulation with the Intervener Gas Company, possibly to the extent of elimination of refunds on at least some of the classifications of service.

7. The organizers of the applicant company apparently had a desire to earn huge profits in a speculative venture, instead of entering into the field of rendering a utility service, regulated for the benefit of the public.

The treatment of facts and the reasoning which enabled me to arrive at the conclusions outlined above are shown in more detail in the following sections:

What Is Public Convenience and Necessity

In order to understand clearly the questions involved in this case it is necessary to analyze briefly the major factors which should be considered in the determination of what constitutes public convenience and necessity. The act creating this Department makes no attempt to define the term, but courts and Commissions have often done so. In the case, Re Northern Maine Transp. Co. (Me 1933) 2 PUR(NS) 95, 104, may be found an excellent summary of excerpts from many cases dealing with the interpretation of public convenience and necessity, as follows:

"In the first place, the convenience and necessity which is to be considered is that of the public and not that of private individuals." Red Star Transp. Co. v. Red Dot Coach Lines, 220 Ky 424, PUR1927E 338, 295 SW 419; Re Chicago Motor Coach Co. (Ill 1927) PUR1928A 564.

"In this connection we are also of the opinion that it is the consuming or patronizing public and not the public in general which is to be considered. The terms 'convenience' and 'necessity' are usually held not to be separable but are to be considered together." Re McCartney (Mo 1927) PUR1928B 525; Re Sumner-Tacoma Stage Co. (Wash [anno]) PUR1924E 303; Re Aldrich (NY 1922) PUR1923A 385; Re Chicago & N. W. R. Co. (Wis 1916) PUR 1917A 303.

"It should be considered as a composite expression, not intended to mean absolute necessity or a slight convenience, and given a reasonable, common-sense interpretation as to whether a particular service is a convenience and necessity, depending in some degree on the wants, needs, and perhaps to some extent the desires of the public.

"Necessity means the public need without which the public is inconvenienced to the extent of being handi-

capped in the pursuit of business or wholesome pleasure or both, without which the public generally are denied, to their detriment that which is enjoyed by other people generally, similarly situated." Chicago, R. I. & P. R. Co. v. State (1927) 126 Okla 48, PUR1928A 255, 258 Pac 874.

"A certificate should be granted or withheld upon the basis of whether the rights, welfare, and interest of the general public will be advanced by the proposed service, and not upon private benefit or advantage that may accrue to any carrier." Re McCartney (Mo 1927) PUR1928C 182.

"The word 'necessity' as used by the statute does not mean something that is indispensable, and the word 'convenience' connected with the word 'necessity' is not connected as an additional requirement but to modify and qualify what might otherwise be regarded as the strict definition of the word 'necessity.' The phrase 'public convenience and necessity' implies a reasonable public convenience that would meet a reasonable public necessity." Re McCartney, *supra.*

"It is for the applicant for a certificate to make an affirmative showing that convenience and necessity requires the service which it is offering to render. Mere desire on the part of the applicant to serve, or on the part of certain customers or patrons to be served, is not enough." Re San Joaquin Light & P. Corp. (Cal 1920) PUR1921A 613; Re Peters (Cal) PUR1925D 736.

"Statements even by a large number of persons that the proposed service would be desirable is not enough." Re Red Star Line (Md 1926) PUR 1927B 145.

"Convenience and necessity are established by evidence of all conditions in the territory to be served, and from this the Commission must draw its own conclusions. Of the factors which will be considered in determining whether convenience and necessity of the public requires the proposed service, the most important is whether the territory is already adequately and satisfactorily served." Superior Motor Bus Co. v. Community Motor Bus Co. 320 Ill 175, PUR 1926C 685, 150 NE 668.

"It has also been held that where the existing service is adequate, it is error for the Commission to grant a certificate to another company." Scioto Valley R. & Power Co. v. Public Utilities Commission (1926) 115 Ohio St 358, PUR1927C 186, 154 NE 320; Choate v. Commerce Commission (1923) 309 Ill 248, 141 NE 12.

"The Commission may not grant a certificate without a finding that existing service is inadequate." Columbus, D. & M. Electric Co. v. Public Utilities Commission, 116 Ohio St 92, PUR1927D 773, 155 NE 646.

"An order of a Commission refusing a certificate to another petitioner is not unreasonable or unlawful when the existing companies are giving adequate service." Citizens Exch. Teleph. Co. v. Public Utilities Commission, 102 Ohio St 570, PUR1921E 318, 132 NE 59.

"It is a generally recognized rule that a Commission will not allow a second utility to enter a field already occupied by another similar utility. This rule is, however, qualified by the requirement that the existing utility must be giving adequate and satisfac-

tory service." Re Portland Taxicab Co. (Me) PUR1923E 772; Re Sumner (Utah) PUR1927D 734; Re Labelle (RI) (1927) PUR1928A 474; Re Roscoe Electric Co. (Wis 1924) PUR1925A 176.

My interpretation of public convenience and necessity is as follows:

First—The "public" shall not necessarily be the general public but shall include that portion of the public affected beneficially or adversely by the creation of or operation of a proposed service or facility. The public must certainly be distinguished from individuals or any particular community, private company, or corporation.

Second—"Convenience and necessity" may be used as a composite expression to indicate need of the "public" for a service or a facility. The extent or degree of the need may vary; it should be essential but not absolutely necessary. It should rightly carry the connotation that "without it the public is inconvenienced to the extent of being handicapped in the pursuit of business or wholesome pleasure or both," without which the public generally are denied to their detriment that which is enjoyed by other people generally, similarly situated.

Third—The most important factor in the determination of whether public convenience and necessity require the construction of a facility or the rendering of a service is whether the territory proposed to be served is being adequately and satisfactorily served. Only in the event it is determined that public convenience and necessity require a service is it necessary to further consider such supplemental points as applicant's ability to serve, applicant's financial ability, applicant's source of supply, type of construction proposed, and the rates at which applicant proposes to serve.

It is reasonable to assume that the legislature, in creating this Department, was providing the means of regulating public utilities primarily for the protection and benefit of the domestic and commercial consumers. This is generally conceived to be the intent of regulation in many other states. The Department, under the provisions of the act creating it, is vested with wide discretionary powers in determining when a certificate of convenience and necessity should issue. It is plain, I believe, that the legislature intended that the Department should give due consideration and weight to all material and relevant facts affecting the public in passing upon such questions.

To prove that public convenience and necessity would require this construction it would be necessary to show that the present service is unsatisfactory, or inadequate, and that the present utility could not or would not remedy that situation. I cannot find sufficient evidence in the record to indicate that either of the conditions obtains. The record is replete with testimony establishing the applicant's ability to serve, while at the same time the adequacy of the present service is admitted by all. It is contended that the present rates for service are too high, but it must be admitted that the Intervener Gas Company has offered to adjust the rates in question the first time this matter has been before the Department for determination.

Who Is the Public in This Case

In this case, the applicant company,

a newly formed corporation, proposes to enter a part of the territory at present being served by the Intervener Gas Company. The part of the public that will be benefited consists of the three industrial customers, the residents of towns that may be served, and individuals along the proposed line of the applicant company. The more important part of the public, which will be adversely affected, is the 44,000 customers receiving service from the system of the Intervener Gas Company in the state of Arkansas. Any action which diverts revenue from the company serving them is a matter of major significance to these customers.

Based upon applicant company's exhibits, service will be available to approximately 300 consumers provided the four towns are served. Numerically, these 300 customers who may be benefited are almost insignificant when compared with the 44,000 who are adversely affected.

Detrimental Effect of Duplication of Facilities

One of the cardinal principles of regulation is that unnecessary duplication of facilities for the rendering of the same service is to be avoided because it is wasteful and ultimately causes higher rates, and is therefore not in the public interest. Commissions and courts throughout the United States have, in their decisions, held steadfastly to this principle of avoiding economic waste.

The Department has, in all its previous orders concerning convenience and necessity, recognized the inadvisability of duplication of public utility facilities and service and has based its orders upon that principle. In granting certificates of convenience and necessity to rural electric coöperatives and private power companies for the construction of rural electric lines, care has been exercised to avoid the duplication of facilities and the attaching, by the applicant, of customers who were receiving service or to whom service was available, at the time of the construction of the new facilities. It is the policy of the Department to establish descriptive territorial boundaries, defining the area in which the coöperative or utility is entitled to render service to the exclusion of all others who might seek to give similar service.

This policy was adopted in an order issued April 22, 1937, in Docket No. 185 (18 PUR(NS) 380, 382) which established standard rules and provisions for extension of rural electric lines on an area basis. This order in part recites: "The primary reason for developing on an area basis is to prevent the selection of the very best rural markets, leaving the less desirable markets unserved, thereby preventing them from receiving service for some time to come. . . . If the good and less desirable markets are put together in one project, it is likely that a desirable, economic unit for rural development can be found. *The area basis also will prevent unfair competition between two or more parties seeking to serve the same area.*" (Italics mine.)

The Department, in its findings in Dockets 338, 339, 258–B, styled "Application of the Craighead Coöperative Corporation and Arkansas Utilities Company for a certificate of convenience and necessity for rural areas in which to construct, maintain, and

operate rural electric lines," wherein the city of Paragould sought to enter into direct competition with an existing utility and a proposed rural electric coöperative corporation in a three mile area surrounding the city of Paragould, denied the city this right. It further set out certain territories to be served by the coöperative corporation and the utility, even though in the case of the coöperative corporation, the rates at which service was proposed to be given were higher than those proposed to be charged by the city of Paragould. The order further states: "This method has been in use since its adoption and is proving very satisfactory. The area basis prevents wasteful expenditure of money for the construction of duplicating facilities."

The city of Hope, intervener in this case, also has benefited by this policy of the Department. In its order of June 25, 1937, in Docket No. 214, the Department granted the application of the city of Hope for a certificate of convenience and necessity to serve with electric energy an area approximately 14 miles square surrounding the city. This grant was for the exclusive right to serve and included the Department's authorization of the purchase by the city of an existing line of a utility within this territory so as to remove this competing service.

I, as Commissioner, concurred in the adoption of all of these orders mentioned.

In this case the building of the applicant company's proposed line will be a duplication of facilities to serve the three industrial customers proposed to be served. The only customers who may receive service and who are not now being served are the residents along the proposed line and in the four towns of Bradley, Saratoga, Fulton, and McNab. The majority opinion does not at this time guarantee service at the rates proposed to these prospective consumers inasmuch as the serving of these towns is not made a condition precedent to the granting of the application. The applicant company instead is directed to make a further study of these towns to determine the feasibility of service to them.

Comparison of Proposed and Present Service

1. *Source of supply.*

The applicant company proposes to secure its gas supply from the leases and wells of the Oliphant Oil Company located in the Cotton valley field in northern Louisiana. The volume of recoverable gas from the leases owned or controlled by the Oliphant Oil Company was not questioned by any of the parties to the case. The applicant company proposes to take gas from the separator near the well-head and convey same through gathering lines to its main $8\frac{5}{8}$-inch transmission line, removing as much of the moisture (natural gasoline content) as is possible by means of separators, scrubbers, drips, etc.

The availability of the gas in the Cotton valley field to the applicant company will be dependent upon a number of factors that were not determinable at the time of the hearing before the Department. The most important factor in the determination of the availability is whether or not the proposed unitization of the Cotton valley field is ultimately consummated.

While witnesses for the applicant company stated that in the event this field were unitized the unit would take over and carry out the terms of the contract between the applicant company and the Oliphant Oil Company, the only copy of a proposed unitization plan introduced in the record does not make any reference to any prior rights for the sale of gas by any of the operators in the field (Intervener's Exhibit No. 19).

The record clearly shows that the Bodcaw Horizon of the Cotton valley field, from which applicant company proposes to secure its gas, is an oil producing sand and that, production from this sand will be subject to the rules, regulations, and orders of the conservation commission of the state of Louisiana and the gas produced will be a by-product of the production of oil. The volume of gas that can be produced from any given number of wells will, therefore, depend upon the gas-oil ratio (volume of gas in cubic feet necessary to produce one barrel of oil) and the daily allowable oil production.

The contract made by the applicant company with the Oliphant Oil Company is firm as to volume for a period of ten years, but the unit price of 3 cents per thousand cubic feet of gas is firm only for a period of five years, after which time the cost of gas to the applicant company may be based entirely upon the going value of gas at that time.

In my opinion the volume of gas under the leases of the Oliphant Oil Company is sufficient to supply the needs of the applicant company over the 10-year period of their contracts, though I seriously doubt that there will be sufficient gas available at all times to supply the needs of the applicant company. It must also be borne in mind that the applicant company will be entirely dependent upon purchased gas for its source of supply.

The Intervener Gas Company secures its supply of gas from gas fields located in the states of Arkansas, Louisiana, and Texas, and in addition to its own production purchases a part of its requirements in gas fields in Louisiana and Texas. The major portion of the gas purchased during the last ten years (period of cement company contract) has been gas produced in the Monroe gas field and contracted for in 1929 at approximately the same time the contract with the cement company was signed. At this time the reserves of the company were very low and the Monroe gas field was the largest source of supply available to it. The company owns producing leases in fourteen producing gas fields in the three states and has a large number of producing gas wells. In addition the company holds proved leases in three gas fields from which they are not producing at the present time. There can be no question as to the adequacy of its supply nor the availability of same. With its varied sources of supply, and its integrated transmission system the possibility of interruptions occasioned by difficulty at the source of supply are negligible.

As far as source of supply, the availability of the supply and the possibility of interruption in service occasioned by difficulties at the source of supply are concerned, the Intervener Gas Company is far better able to render adequate and uninterrupted gas service than is applicant company

and, on this point, public convenience and necessity would be better served by the denial of the application.

2. *Character of gas.*

If the plan of the applicant company to use gas direct from the wells without running it through a natural gasoline extraction plant is found to be feasible for the industrial service it proposes to render, it will result in the delivery of gas of an approximate net heating value of 1,100 B.T.U. per cubic foot, provided there is no loss in heating value through condensation in the transmission line. In case it is later found necessary or expedient to run this gas through a natural gasoline extraction plant prior to its entry into the transmission line the net heating value will be reduced from approximately 1,100 B.T.U. to approximately 1,000 B.T.U. per cubic foot. Under the contract between the applicant company and the Ideal Cement Company the gas deliveries are to be based upon a minimum net heating value of 950 B.T.U. per cubic foot and adjustment downward in the rates charged are provided for, in case the net heating value of gas delivered is below this minimum.

The gas supplied by the Intervener Gas Company has an approximate net heating value of 940 B.T.U. Previous tests have shown that the gas secured by the Intervener Gas Company from the Monroe Gas Field in Louisiana is the lowest in heating value of any entering into the transmission lines of the company. The major contracts for the purchase and transportation of Monroe gas have expired or do expire prior to January 1, 1940, after which time the net heating value of the gas will be increased by the replacement of this volume with higher B.T.U. gas from the company's own wells. In the interest of safety the company has found that it is necessary to run a large portion of the higher B.T.U. gas that it produces from its own wells through natural gasoline plants and extract the gasoline in order to supply a safe dry gas to its residential and commercial customers. This requirement in the interest of public safety has the effect of increasing the disparity in heating value of the gas delivered by the intervener and that proposed to be delivered by the applicant company.

In my opinion, the difference in B.T.U. content between the gas delivered by the Intervener Gas Company and that proposed to be delivered by the applicant company should not be given any favorable consideration in the granting of this application. To do so would place a penalty upon the Intervener Gas Company for its operations necessary for public safety. Further, it is plain to me that the necessity of having a supply of gas adequate to fulfill the terms of the original 10-year contract with the cement company was one of the factors that caused the Intervener Gas Company to enter into the 10-year contracts for the purchase of gas from the Monroe Gas Field. Therefore, the steps taken to assure the cement company a continuous supply of gas has directly affected the heating value of that gas and to give consideration at this time to such heating value would be a direct penalty for proper operations.

3. *Facilities to serve.*

The applicant company proposes to

construct approximately 75 miles of 8⅝-inch line with a 6-inch spur line to the city of Hope Municipal Light and Water Plant and a 4-inch branch line to the Hope Brick Works. There is no question as to the ability of the applicant company to construct such lines, and little doubt but that the facilities proposed by the applicant company will render satisfactory gas service to the area proposed to be served so long as the demand placed upon the system is within the capacity of the system to supply it.

The facilities of the Intervener Gas Company are so arranged and constructed that there could be and has been a minimum of interruptions in the service supplied by that company.

4. *Capital structure and financing.*

The original application requested approval of the issuance of a mortgage upon the property of the company which was to be given to T. R. Jones, the contractor, in payment for the construction of the pipe line. The mortgage was to be paid in five instalments, the first four in the sum of $50,000 each, and the fifth for the balance. The first instalment was to become payable on September 1, 1940, and one instalment each year thereafter until all were paid. Even after the entry of the Boettcher interest in the company the same general plan was proposed to be followed. In the hearing before the Department, cross-examination by the Commissioners indicated that this proposed plan of financing did not and would not meet with the approval of the Department, whereupon applicant company proposed, if required by the Department, to finance with half cash and half mortgage, and if this plan were not satisfactory to put the entire amount of cash into the project with no mortgage.

The plan as first proposed, in my opinion, indicated purely a promotional scheme whereby the common stockholders took no financial risk and stood to reap an enormous profit from the investment of $1 per share in 1,000 shares of common stock. The majority opinion, while disapproving the proposed plan, did not establish a definite and clear plan of financing. Most certainly neither the proposed plan nor its promotional features are in any way persuasive to the granting of the application.

5. *Ability to operate.*

I do not question the ability of the owners of the applicant company to organize a competent and adequate operating force, and to operate the property in a satisfactory manner.

Rates

1. *Comparison of rates.*

After a careful study of the majority opinion I have come to the conclusion that the majority has not made a definite and direct finding that the rates of the Intervener Gas Company are unreasonable. I do believe, however, that the majority opinion makes the indirect finding that these rates are unreasonable and that the granting of the application is based entirely upon this finding.

In any application for a certificate of convenience and necessity, the burden of proof rests upon the applicant. If the question of the unreasonableness of the rates of the existing utility is a factor in determining public con-

venience and necessity, the burden of proving them unreasonable likewise rests upon the applicant. Any proceeding upon an application for a certificate of convenience and necessity to enter a territory already served would then become a rate case and, as such, would be subject to all of the factors necessary to be presented and considered in that connection. Such a circumstance would be absurd and this was recognized by both parties in the proceedings before the Federal Power Commission and this Department.

Consideration of the reasonableness of the rates of the Intervener Gas Company was ruled out by the examiner in the proceeding before Federal Power Commission. The record of the hearing before this Department follows the same general procedure in that it does not contain sufficient evidence upon which to base a finding that any of the rates charged by the Intervener Gas Company are insufficient, reasonable, or excessive.

The reasonableness of a utility rate can be definitely determined only by a thorough study of its property and records. A comparison of these rates with those of other similar utilities will serve as a rough check, but a Commission is not justified in making any finding as to the reasonableness of rates upon this basis. Where the difference is large, it would undoubtedly serve to call attention to the fact that, upon investigation, the high rate could probably be reduced. Also in considering such differences in rates it would be necessary to take into account the character of the company's business, that is, the type of service it is rendering.

In this proceeding the primary purpose of the application is to obtain authorization to serve three large industrial consumers. It was not proposed to serve residential consumers until after the injection of that possibility in the hearing before the Federal Power Commission. The customers proposed to be served are high load factor consumers and as such are the most desirable type in that their use of gas is not subject to violent fluctuations in volume over any given period as is the case with the domestic and commercial consumers. The applicant company is taking from the Intervener Gas Company customers having a consumption record that is well established. They do not have the speculative aspects as would new untried customers coming onto a utility system.

It is generally conceded, and I believe it to be a fact, that with a regulated gas utility the revenue from industrial contracts, provided it exceeds incremental cost, reacts beneficially to the domestic and commercial customers. It is also evident that it is a more expensive operation per unit of service delivered, to serve domestic and commercial customers than industrial. A company serving industrial customers alone, such as the three involved in this issue, on a full cost basis, could do so at a lower price than a company which is also serving the general public, particularly with a nearer supply of gas.

The extent of the domestic and commercial service offered by the applicant company is almost negligible when compared to the industrial business which it intends to serve. The following percentages have been derived from applicant's exhibits and the Department's records:

	Applicant Company (Inc. Est. Sales in 4 Towns)		Intervener Gas Company (Year 1938)	
	Domestic and Commercial	Industrial	Domestic and Commercial	Industrial
Per cent of total sales in M cu. ft.	1.03%	98.97%	21.17%	78.83%
Per cent of total revenue	4.43%	95.57%	49.75%	50.25%

In my mind the above comparison, showing the relatively small amount of the domestic and commercial business, is proof of the analogy of this issue to the Service Gas Company Case before the Pennsylvania Public Service Commission in which that Commission (on June 23, 1936) denied a similar application and in its decision stated:

"We will first consider the matter of rates. It is not proposed to serve gas to domestic consumers, except such as may be located in close proximity to the transmission mains of the Service Gas Company. Commercial consumers will not be served. The primary purpose of the application is to obtain authorization of the sale of gas to industrial consumers. . . .

"It is significant in this regard that the Service Gas Company proposes to serve only the large consumers of gas, so that, even if only a small number of customers take service from it, the loss to the companies now in the field will be large in amount. Thus, the proposed corporation, if it benefits any one in the last analysis, would confer that benefit only upon industrial users of gas at the expense of domestic and commercial consumers which applicants do not intend to serve. Such industrial consumers as continue to take service from the established companies would also be in danger of having their rates increased." 15 PUR (NS) 202, 204, 205.

Let me here state that the above discussion on rates is not intended to be a defense of the present industrial rates of the Intervener Gas Company, but it is most obvious to me that the determination of the reasonableness of an existing company's rates by comparison with those offered by one desiring to enter the field under entirely different conditions of service is a dangerous practice and should not be indulged in by the body created by the statutes of the state to regulate and promulgate proper rates.

I hold that in the event the majority had sufficient evidence before it in the record, and thereon made a finding, that the rates of the Intervener Gas Company are excessive, the remedy would lie in the establishment of proper rates. I again quote from the Service Gas Company Case:

"It is our opinion that if the rates or service of the existing companies are improper or inadequate, the remedy lies in correction of such impropriety or inadequacy rather than in the authorization of competition by a group which cannot assure, even to a restricted section of the public, the continuance either of the lower rates it offers, or of the gas supply which it proposes to furnish." 15 PUR(NS) at p. 209.

2. *Method of determining industrial rates.*

The Intervener Gas Company introduced a considerable amount of testimony dealing with its methods of determining industrial rates. The statement was made that the domestic

and commercial users of the company are ultimately benefited by the practice of holding the industrial rates to a level which would be somewhat lower than costs for other competing fuels. The rates for the three industrial consumers in this proceeding are, according to the record, such as to give these consumers a somewhat lower fuel cost by the use of gas at these rates, than they could obtain by using oil or coal. Although I do not agree in every detail with the Intervener Gas Company's contention, there is merit in the theory that industrial gas rates should be based upon the cost of competing fuels so that the rates of the remaining customers on the system may be beneficially affected.

There are many who hold that regulation should not attempt to establish industrial rates but that they should be allowed to adjust themselves by competition with other types of fuel. Applicant company's witness, Connor, a consulting engineer of Dallas, Texas, with wide experience in natural gas rates and other matters, was of the opinion that this theory is sound.

In response to questions in line with this thought this witness answered as follows:

"I think a natural gas pipe-line company should endeavor to secure all the fuel business it can possibly secure at a rate which would give an operating profit, providing it has plant capacity to render that class of service. I think it should undersell any fuel available to any consumer to get the business if he can. I do not think it should reduce that price below a fair competitive price, because whatever it gets from those sources, of course, will reflect in the over-all gross earnings and has a corresponding effect on the domestic rate. . . .

"I think the regulatory Commission should let them go out and make the best trade they can with anybody. . . .

"I think in the long run the best interests of all concerned would be best served by that method, as I view it. It would be a very difficult process to attempt to fix rates for a class of service which is strictly competitive. You might have a schedule of rates on which you have predicated your domestic business which would be too high, and a company would come in with a new schedule of rates, and if they wanted to hold the business they would have to—even though the fixed rate had not been in effect more than a month—junk the whole procedure. I think the question of discrimination should be weighed, too. I think if a utility serving the general public should have a situation arise where some industrial on its system, by reason that its location with reference to competitive fuel, created a situation where the company could buy fuel lower than the uniform rate, that the utility had fixed for its entire system, I think the utility should be permitted to retain that business, even at a lower rate than similar classes of business on other portions of its system without being charged with discrimination, for the reason that the probabilities are that the customer would be in position to take advantage of that lower rate anyhow, that is, if somebody agreed to build a line up to him. The existing or operating company of an integrated system should be permitted to meet that competition by the Commission

and those are matters the Commission should have jurisdiction over. Most companies have a uniform schedule throughout their system, but they should be allowed to vary that schedule to meet a situation like that, and not be charged with discrimination against similar classes of business of a pipe-line system."

I cannot join in a finding that the rates established by a utility, following this theory of rate making, are unreasonable and exorbitant when a policy, consistent with the views of the Department on the subject, has not as yet been established by the Department.

Whether we agree with these theories or not is a matter of opinion and judgment. We cannot, however, overlook the fact that any reductions made in the industrial rates will effect a reduction in the revenue received by a company from this source and will, in the end, adversely affect the rates paid by the domestic and commercial consumers when the total revenue of the utility, necessary to yield a fair return, is set by the regulatory body.

3. *Domestic and commercial rates proposed by applicant company in the towns of Fulton, Bradley, Saratoga, and McNab.*

It is my opinion that the domestic and commercial rates, namely, 45 cents and 22 cents per thousand cubic feet, proposed by the applicant company in these towns had some persuasive effect upon the granting of the application and in support of this I quote the following paragraph from the majority opinion:

"All industrial, domestic, and commercial rates now available to natural gas consumers in the immediate territory proposed to be served by the applicant company are substantially higher than similar classifications of service offered by the applicant company."

The following is a tabulation of the estimated cost of the branch lines and distribution systems in the four towns with the net revenue available for return and the per cent return on the cost according to the applicant company's exhibits and testimony:

Town	Cost of Property			Annual Net Revenue Available for Return	Per Cent Return on Investment
	Branch Line	Distribution System	Total		
Bradley	$9,400	$6,540	$15,940	$76	0.48%
McNab	2,960	3,437	6,397	40	0.63%
Fulton	3,400	4,136	7,538	50	0.66%
Saratoga	2,100	3,237	5,337	40	0.75%
Total	$17,860	$17,350	$35,212	$206	0.59%

I call attention to the fact that in these exhibits all of the gas sales in these towns were calculated at 45 cents per thousand cubic feet, this in spite of the differential in rates proposed by the applicant company for domestic and commercial customers. In the calculation of the net revenue shown above there is no charge for any use of the main 8⅝-inch transmission line.

Assuming 6 per cent as a rate of return, the total net requirement, giving no consideration to income tax, on the cost of $35,212 would be $2,113. The net revenue available for return, not considering income tax, as shown

by the earnings statement would be a total of $206. This would result in an amount of $1,907 less than a 6 per cent return. The total estimated gas sales, as shown by the income statement, is 12,360 thousand cubic feet, which, when divided into the $1,-907 would be 15.4 cents per thousand cubic feet. This is the average amount per thousand cubic feet that the 45-cent rate, used in the earning statement, is deficient in yielding sufficient revenue to pay a 6 per cent return upon the cost of the spur lines and distribution systems. This amount added to the 45 cents would give an average rate of 60.4 cents per thousand cubic feet which would still be less than would be required if these consumers were to be charged their full cost of service.

The above calculations show that rates quoted by an applicant to serve should be carefully examined to determine whether or not such rates should be adopted and used for comparative purposes. I am not averse to the theory which allows domestic and commercial customers to be served at lower rates by virtue of the earnings from industrial service when the reason for these lower rates is recognized.

Effect on Other Customers of Intervener Gas Company

In my opinion the granting of this application will have a material detrimental effect upon the rates to be charged all of the other customers now being served by the Intervener Gas Company in the state of Arkansas. To me, this one thing has more to do with the justification of the granting or denial of the application than any other factor. Throughout the hearing I waited to see what evidence, if any, would be presented on this subject and at the conclusion of both the applicant's and intervener's case the record contained so little evidence bearing on this matter that I deemed it necessary to call upon two members of the Department's staff who had been directly in charge of the Department's investigation of the Intervener Gas Company, seeking to determine in my own mind in what manner the granting of the certificate would affect the present gas consumers other than those proposed to be served by the applicant company.

The effects of the granting of the application upon the other customers are many and varied. Some are not fully determinable in dollars and cents, while others are subject to rather accurate determination. I do not believe that the granting of this application will make it necessary for the rates to the other industrial, domestic, and commercial customers to be increased at this time. I do think, however, that in the final adjudication of the Department's present investigation of the Intervener Gas Company the rates for domestic and commercial customers will be materially higher than they would have been had the application been denied.

Measured in dollars and cents the net revenue loss to the Intervener Gas Company by the severance of these three industrial customers has been estimated to be $197,900 per year. As I now see it, the final rate reduction found by the Department will be decreased by at least this amount, which will mean that on an average each of the 44,000 other customers of the company in the state of Arkansas

would pay a monthly bill which would be 37.5 cents higher than it would have been had the application been denied. This calculation does not take into consideration any further decrease in industrial revenues which will necessarily occur by the reduction of rates to other industrial customers to a level comparable to those established by the applicant company.

It is generally conceded that noncompetitive enterprises do not enjoy a rate of return comparable with the rate received by those companies faced with a possibility of having certain of their properties rendered inoperative and perhaps valueless by the building of duplicate facilities by competitors. This fact was recognized in the recent decision of Federal Judge Ragon in Arkansas Louisiana Gas Co. v. Texarkana (1936) 17 F Supp 447, 17 PUR(NS) 241, 265, in which a 6 per cent rate of return was established, although the Arkansas Louisiana Gas Company contended that a rate of return of 8 per cent on transmission lines and 10 per cent on distribution properties should be allowed. Judge Ragon said: "The hazards of the occupation is likewise to be considered in arriving at a proper rate of return." He referred to the rule as laid down in Willcox v. Consolidated Gas Co. (1909) 212 US 19, 48, 53 L ed 382, 29 S Ct 192, 198, 48 LRA(NS) 1134, 15 Ann Cas 1034, by quoting as follows:

"There is no particular rate of compensation which must, in all cases and in all parts of the country, be regarded as sufficient for capital invested in business enterprises. Such compensation must depend greatly upon circumstances and locality; among other things, the amount of risk in the business is a most important factor, as well as the locality where the business is conducted, and the rate expected and usually realized there upon investments of a somewhat similar nature with regard to the risk attending them. There may be other matters which, in some cases, might also be properly taken into account in determining the rate which an investor might properly expect or hope to receive and which he would be entitled to without legislative interference. The less risk, the less right to any unusual returns upon the investments. One who invests his money in a business of a somewhat hazardous character is very properly held to have the right to a larger return, without legislative interference than can be obtained from an investment in government bonds or other perfectly safe security."

In this case a 6 per cent of return was also established, even though the company had contended for a higher rate.

A further reason for a lower rate of return because of lack of competition is found in the following quotation from the Texarkana Case, *supra,* at p. 266 of 17 PUR(NS):

"The company enjoys, for all practical purposes, a monopoly in its line of business in the territory affected. The hazards of this industry are reduced to a minimum when compared to experiences of other companies engaged in the same industry. The only competition arising out of the availability of cheaper fuels."

The treatment of industrial customers in the decision in the Texarkana Case was to leave the rates undisturbed and to use the net profit

from industrial sales as a credit to the cost of gas to the domestic and commercial customers. The establishment of a lower rate of return than that claimed by the company was justified, to a great extent, on the basis of the company's being a monopoly and not threatened with competition except by other fuels.

I am of the opinion that the granting of the application may have a further detrimental effect upon the 44,000 other customers of the Intervener Gas Company in the state of Arkansas through the establishment of a higher rate of return than the Department could have established had the application been denied.

The majority opinion under the heading of "Effect on Other Customers" in regard to the loss of the business by the Intervener Gas Company, stated as follows: "It is the opinion of the Department that the Intervener Gas Company has the opportunity to secure added revenue from new business which is available in this area to offset the loss of revenue from the three industrial customers."

If the statement of the majority opinion is a fact, it is just as reasonable to have expected the applicant company to have obtained its business from the new business available in this area instead of adversely affecting the customers on the system of the Intervener Gas Company by taking established business from it.

Whether or not the Intervener Gas Company is able to obtain added revenue to offset the loss in revenue occasioned by the severance of the three industrial customers from its system, the fact remains that the net revenue lost will never benefit the remaining customers in the form of decreased rates. It may be said further, that if the application had been denied and the Intervener Gas Company permitted to retain these customers, any new business obtained would assist in further lowering rates.

Another example of the detrimental effect upon the remaining customers after the severance of the three industrial customers is found in the investment that remains and is necessary to serve the domestic and commercial customers in the territory adjacent to the cement company. The Intervener Gas Company has served the cement company, the towns of Okay, Washington, Ashdown, Nashville, and Mineral Springs from a 10-inch line and extensions laid at the time of the beginning of service to the cement company.

A total of 654 domestic and commercial customers is served from the distribution systems in these towns. The total cost of these transmission lines (not including distribution systems) is shown by the record to have been $385,517. The idle capacity in the 10-inch line from Trees compressor station to Okay, if the cement company load were lost, has been estimated to be approximately $100,000, which is the difference between the cost of the 10-inch line and the cost of a 6-inch line, necessary to serve the remaining customers. Assuming that the Department, in its pending rate case with the Intervener Gas Company, would be justified in excluding this idle capacity from the rate base, there would remain a direct investment of $285,517 in transmission lines to serve only the 654 remaining domestic and commercial customers. This will re-

sult in a transmission line investment for this part of the system much in excess of the average per customer for the state of Arkansas.

In concluding my remarks on this section I again quote from Pennsylvania Public Service Commission in Re Service Gas Co. (1936) 15 PUR (NS) 202, 207, which so aptly expresses my opinion:

"It is therefore clear that any advantage which could accrue to certain industrial consumers might be bought at too great a cost to the remaining industrial, commercial, and domestic consumers."

Effect upon Department's Investigation of Intervener Gas Company

The majority opinion dismisses consideration of the Department's pending system-wide rate investigation of the Intervener Gas Company with the declaration that it should not affect a decision in this case. I cannot acquiesce in this view.

The decision for the applicant company will have a major effect upon the ultimate outcome of the investigation. The decision establishes a policy which will affect the rate of interest required to attract capital for investment in the existing utility. It will necessitate the reclassification of certain facilities to nonused-or-useful property, or it will impose upon the remaining customers of the Intervener Gas Company's system certain costs now allocable to the three industrial customers to be served by applicant company. It will have a serious effect upon the demand and commodity basis most likely to be used by the Department in determining costs. It will undoubtedly have a marked effect upon the projection of revenue for the Intervener Gas Company and in this way seriously reduce the amount of rate reduction which the Department may obtain.

In order that there may be no misinterpretation of my position I wish to go on record that at this stage of the investigation of the Intervener Gas Company, I am convinced that rate reductions will be made. I cannot say now to what extent or which classification of service will receive most benefit. I do most emphatically believe, however, that if industrial revenues, as in the instant case, are diverted from the Intervener Gas Company, there will result a corresponding lowering of the amount of rate reduction which the Department may be able to obtain.

Effect upon Stipulation between the Department and Intervener Gas Company

As set out in the facts of this order, the Department and the Intervener Gas Company entered into a stipulation providing for refund from January 1, 1938, to be made to customers in the event the Department is able to establish rate reductions in certain amounts. The majority opinion has held that the existence of this stipulation does not warrant the denying of the application.

With respect to the industrial customers of the Intervener Gas Company, the Department must secure rate reductions in the amount of at least $125,000 annually in order for the refund to be made. It is evident to me that with the Department giving its sanction to a competing enterprise, which will in effect reduce the gross industrial revenue of the Intervener

Gas Company by an amount of, roughly $268,000 annually, it will be just that much more difficult to secure a sufficient rate reduction among this class of consumers to justify the refund. It might very easily result in decreasing the amount of reduction to such an extent that no refund at all would be due and payable.

Considering the magnitude of the effects of the granting of the application, I do not see how the majority can find that the existence of the stipulation should be disregarded in passing upon the question.

Applicant Company's Proposed Earnings

Since the majority opinion does not require service to be extended to the four towns at this time, a revised earning statement eliminating them should be made. This statement, based on a value of $461,000 (proportional amount of total value used by majority with towns eliminated) showing the net return and percentage of return sought by the applicant company is as follows:

Year	Net Return	Rate of Return
1940	$62,183.51	13.49%
1941	68,397.00	14.84%
1942	98,321.69	21.33%
1943	97,760.55	21.21%
1944	97,199.41	21.08%

This apparent intent to earn what, upon its face, is an excessive rate of return, leads me to believe that the project was from its inception a speculative venture and the applicant company is not imbued with the idea of rendering a utility service regulated for the benefit of the consuming public.

Conclusion

I have set out in the foregoing what, in my opinion, are the major points involved in this proceeding and my conclusions thereon. The applicant company failed to prove convenience and necessity, and that the facts in the case did not justify the granting of the application. It is my opinion that the Department, in disposing of the issues raised by this proceeding, should have taken the following action:

1. Denied the application on the grounds that public convenience and necessity does not warrant the construction.

2. Ordered the Intervener Gas Company to serve the three industrial customers at the 10-cent rate in accordance with the offer made by that company in the hearing, this rate to remain in effect until such time as the proper rate is finally determined by the Department.

3. Ordered the Intervener Gas Company to make a survey of each of the towns of Bradley, McNab, Fulton and Saratoga, to determine the feasibility of giving service to these towns.

4. Ordered the Intervener Gas Company to make a similar survey for the town of DeQueen.

5. Provided for the Intervener Gas Company to construct such facilities found to be feasible by these surveys.

6. Stated that it stands ready to establish proper wholesale city gate rate for the city of Hope at which the Intervener Gas Company would render service from its system when the city had consummated its stated intention to acquire the Intervener Gas Company's distribution system located in that city.

Had the Department followed the above-outlined procedure its action would have avoided the needless and wasteful duplication of facilities and would not have placed any penalty upon the remaining customers on the lines of the Intervener Gas Company for the specific benefit of three industrial customers. It is my opinion such action would have been in the interest of the entire gas consuming public affected by this issue.

MICHIGAN SUPREME COURT

Johnson F. Ritchie

v.

Council of City of Harrisville

[No 153.]

(— Mich —, 289 NW 197.)

Municipal plants, § 25 — Debt limit — Revenue bonds.

1. Bonds payable solely from the revenues of a municipal plant, the construction and operation of which they were issued to finance, are not debts within the meaning of constitutional and statutory limitations, p. 255.

Municipal plants, § 25 — Revenue bonds — What constitutes public debt.

2. Revenue bonds issued to obtain a portion of the fund needed to construct a municipal plant, and payable solely from the revenues of such plant, do not create a debt in excess of statutory limitations, although part of the cost of the project is to be derived from the sale of general obligation bonds and from the general fund of the city, p. 255.

[December 19, 1939.]

APPEAL *from decree of dismissal in suit to restrain municipality from issuing and selling revenue bonds; affirmed.*

APPEARANCES: William R. Barber, of Harrisville, for appellant; Herbert Hertzler, of Harrisville, for appellee.

CHANDLER, J.: The city of Harrisville has partially completed the construction of a municipal water supply and distribution system, the total cost thereof being $61,572.92, said sum to be derived from the following sources: $40,384.04 from the Federal government; $10,000 from the sale of general obligation bonds of the city of Harrisville; $1,188.88 from the general fund of the city; and the balance of $10,000 from the sale of revenue bonds issued pursuant to the provisions of Act No. 94, Pub. Acts 1933, as amended by Act No. 66, Pub. Acts 1935 (Stat. Ann. § 5.2731 et seq.).

Plaintiff, a taxpayer of the city,

filed the bill of complaint herein to restrain the legislative body of the municipality from issuing and selling the revenue bonds to be issued as aforesaid. The trial court dismissed the bill of complaint and plaintiff appeals.

The principal and interest of the proposed issue is to be payable out of revenues to be derived from the operation of the completed project. Plaintiff contends, that because part of the cost of such project is to be derived from the general fund of the city and part from the sale of general obligation bonds, the proposed revenue bonds create a debt in excess of the limitations imposed by 1 Comp. Laws 1929, §§ 2091, 2092 (Stat. Ann. §§ 5.1886, 5.1887).

[1, 2] It is established beyond dispute that bonds payable solely from revenues of the particular utility involved are not debts within the meaning of constitutional and statutory limitations. Young v. Ann Arbor (1934) 267 Mich 241, 255 NW 579; Block v. Charlevoix (1934) 267 Mich 255, 255 NW 579; Gilbert v. Traverse City (1934) 267 Mich 257, 255 NW 585; Attorney General v. State Bridge Commission (1936) 277 Mich 373, 269 NW 388, 270 NW 308; Michigan Gas & E. Co. v. Dowagiac (1936) 278 Mich 522, 270 NW 772.

The principal argument seems to be that these cases only apply in instances where the entire cost of the project is supplied by proceeds from the sale of revenue bonds. We can see no distinction between the case at bar and a case where an addition is made to an existing public project and the entire revenues thereof, after the addition is completed, are to be used in payment of principal and interest of bonds issued under the provisions of the cited statutes. Such a question was presented in Gilbert v. Traverse City, *supra,* and was decided adversely to the contentions of appellant. That decision controls the instant case.

The decree is affirmed, but without costs as a public question is involved.

Butzel, C. J., and Wiest, Bushnell, Sharpe, Potter, North, and McAllister, JJ., concur.

CALIFORNIA RAILROAD COMMISSION

Re California Motor Express, Limited

[Decision No. 32653, Application No. 23165.]

Security issues, § 103 — Stock dividend — Reimbursement of treasury.

A public utility will be authorized to issue stock to reimburse its treasury for the acquisition of a like sum which the company has accumulated from the operation of its business, such stock to be distributed to stockholders as a stock dividend, resulting in the transfer of the amount involved from surplus to capital stock account.

[December 19, 1939.]

CALIFORNIA RAILROAD COMMISSION

APPLICATION *for authority to issue stock to reimburse express company's treasury; granted.*

By the COMMISSION: California Motor Express, Ltd., asks permission to issue 300 shares of its common stock at a stated value of $174 per share, or an aggregate stated value of $52,200, to reimburse its treasury for the acquisition of a like sum which applicant has accumulated from the operation of its business.

California Motor Express, Ltd., is engaged in the transportation of property as a common carrier between points in central and southern California under, and in accordance with its express tariffs on file with the Commission. It does not own or operate any motor equipment but transports its express shipments over the lines of other common carriers. Shipments between San Francisco and Oakland, on the one hand, and Los Angeles on the other hand, are transported over the line of California Motor Transport Co. Ltd., a highway common carrier, operating under certificates of public convenience and necessity granted by the Commission. Between Los Angeles and other points in southern California, applicant transports its express shipments over the lines of other and various common carriers.

Applicant's revenues for the nine months ending September 30, 1939, are reported at $468,517.12. As of September 30, 1939, applicant reports its assets and liabilities as follows:

Assets

Current Assets		$238,930.38
Cash on Hand and in Banks	$130,034.29	
Accounts Receivable	56,918.19	
Advances to Officers, Employees	51,977.90	
Capital		1,879.95
Furniture & Fixtures	$4,043.97	
Less Reserve for Depreciation	2,164.02	
Deferred Assets		3,004.64
Special Deposits	$69.60	
Prepaid Insurance	210.82	
Stationery & Supplies	2,724.22	
Total Assets		$243,814.97

Liabilities

Current Liabilities and Surplus		$143,879.81
Accounts Payable	$125,599.39	
C. O. D.'s Payable	9,621.93	
Advances and Beyond Charges	3,786.06	
Accrued Taxes Payable	4,872.43	
Capital Stock		8,700.00
Surplus		91,235.16
Total Liabilities & Surplus		$243,814.97

The $8,700 of outstanding capital stock is represented by 50 shares.

The stock which applicant desires to issue will be distributed to its stockholders as a stock dividend. The result will be the transfer of $52,200 from surplus to the capital stock account. In its petition, applicant recites that it intends and agrees that it will at no time declare any cash dividend unless its net current assets are equal to the stated value of all of its outstanding stock. It should likewise cease to make loans to its stockholders.

Industrial Progress

Selected information about manufacturers, new products, and new methods. Also news on personnel changes, recent and coming events.

Commonwealth Edison Plans $100,000,000 Outlay

CHARLES Y. Freeman, chairman of the Commonwealth Edison Company of Chicago, announced recently that approximately $100,000,000 will be spent by the utility system for new construction and expansion purposes in the next three years. This program should provide, he said, not only for the estimated growth in the system load but also the reserve necessary for proper operation of the system.

The construction program as outlined by Mr. Freeman contemplates that for 1940, 1941 and 1942 about 360,000 kilowatts of additional electric generating capacity will be installed, taking into account the retirement of certain older units which are to be dismantled.

The construction program for 1940, which is now under way, involves the expenditure of approximately $42,000,000. The two major projects under way will provide over 200,000 kilowatts of additional electric generating capacity at two stations, half of which is to be ready this Fall and the remainder in the Fall of 1941.

Paper-Users Reference Book Issued by Weston

"WESTON'S Red Book," a pocket-size, ready-reference book of value to all users of quality, rag content ledger, index, machine accounting and bond papers, contains a complete description of the entire Weston line with all the information necessary to select the right paper for records, forms, reports, correspondence and similar usages. It also contains useful information and tables such as trade customs, comparative weights, dictionary of paper terms, carton packing schedule, names for sizes of ledger papers, etc.

Copies of the "Red Book" may be secured free on request from Byron Weston Company, Dalton, Mass.

A. T. & T. Reports 82,600 Gain in Phones

AGAIN of about 82,600 telephones in service was recorded in March by principal subsidiaries of American Telephone & Telegraph Co., it was announced.

At the end of March this year there were about 16,795,300 telephones in the Bell system, according to the announcement.

1939 Industrial Safety Record Best In Chrysler History

SAFETY in Chrysler Corporation's plants for the year 1939 was greater than in any other year of the Company's history, according to a report made public by C. T. Winegar, director of personnel of the corporation.

During 1939, Mr. Winegar pointed out, there were 15.6 percent less accidents per man hours worked than in 1938, and 45.45 percent less than the average for the last ten years. (The only years for which there are complete records).

Nelson Fritz Appointed to Asplundh Staff

THE Asplundh Tree Expert Company announces the appointment of Nelson H. Fritz, graduate forester, to its staff of experts.

For the past six years, Mr. Fritz has been district forester for the state of Maryland, a state whose rigid tree trimming requirements are at times a decided handicap to the utilities. With his understanding of both sides of the question, the Asplundh Company feels that it can give full measures of service to its clients in their line clearance problems, assuring satisfaction to all parties concerned.

Mr. Fritz will also conduct the Training School required for all Asplundh workmen. This company believes that through education and public relations, the tree conscious public will realize that trees can be properly treated, while at the same time, allowing adequate clearance for utility wires.

Lewis H. Brown Reports to J-M Workers For '39

A NEW "every day arithmetic" which is being developed to dispel the mysteries which industrial workers find in the financial operations of modern-day business, took another stride forward recently when Lewis H. Brown, president of Johns-Manville made his annual report to J-M employees.

Instead of the usual formal report, filled with a bewildering array of figures, Mr. Brown's report makes clear to each worker just exactly how the "J-M Dollar" was spent in 1939. Cartoons portray the "J-M Dollar" as a gnomelike figure, whose adventures explain such mysterious sounding accounting terms as "surplus," "returns and allowances" and "de-

preciation and depletion." This is the third annual report in which Mr. Brown has simplified the financial operations of Johns-Manville in a form readily assimilated by the industrial workers of the corporation—a form which Mr. Brown has pioneered.

To show exactly what happened to all of the money taken in by the Company during the year, Mr. Brown asks that employees think of the total amount as "just 100 cents"—one dollar—and each cent as one per cent. Then the cartoon shows where each cent in the dollar went; 61 cents for raw materials, selling and production expenses; 32 cents for wages and salaries; 5 cents for stockholders dividends; and "2 cents was set aside for the financial safety of jobholders and stockholders."

Included in this report for the first time is a "quiz" department in which Mr. Brown answers clearly such controversial questions between capital and labor as "Do the stockholders get too much profits?"; "If the officers of the Corporation weren't paid such big salaries wouldn't the employees be able to get a lot more?"; and "Are taxes as important to jobholders as employers say they are?"

Westinghouse Announces New Multi-Job Cleaner For Home

DESCRIBED as a complete home cleaning service because of the many functions it performs, a new cylinder-type vacuum cleaner known as the "Pacemaker" is announced by the Merchandising Division, Westinghouse Electric & Manufacturing Company, Mansfield, Ohio.

The new cleaner provides a complete home cleaning service because in addition to cleaning rugs, it does many other cleaning jobs in the home.

The cleaner cylinder is all-steel, finished in a baked-on gray hammered effect, and the ends are of polished chromium. The cleaner stands on end for ease of removing dust. Placed in the center of a room, the cleaner has a 26-foot cleaning radius. All tools are protected by soft rubber bumpers.

George E. Wagner, former laundry equipment regional supervisor of Westinghouse Electric and Manufacturing Co., has been appointed manager of the vacuum cleaner section of the appliance department.

$1,437,000 Program Planned by Pennsylvania Edison Co.

WILLIAM H. Wade, vice president of the Pennsylvania Edison Company, announced the company will spend $1,437,000 this year for improvements in central and southern Pennsylvania.

Chevrolet Sales Increase

CHEVROLET dealers' retail sales of new cars and trucks in the month of March totalled 106,014, an increase of 41.1 per cent over the February record, it was announced recently at the company headquarters. Sales for the month were the highest recorded since April, 1937, comparison of the figures showed.

Sales for the first quarter, the report showed, were 254,751, as compared with 191,607 in the first quarter of 1939. The increase amounts to 33.0 per cent.

"Gas Wonderland" at New York World's Fair

AMERICA'S gas industries will be represented at this year's New York World's Fair by a new and different group of displays to be known as "Gas Wonderland" which will be filled with all sorts of novelties and surprises, according to an announcement from Gas Exhibits, Inc., the non-profit organization that sponsors the exhibit.

"Conceived on more dramatic and spectacular lines than those of 1939, this year's displays will embody new elements of showmanship that will emphasize the marvelous progress which all branches of the gas industry have made in creating appliances and equipment that add to the comfort of the home," the announcement stated.

New Trenching Machine Performs Three Operations

"MODEL 80" Cleveland Trencher's recently announced machine which performs three important operations—backfilling, tamping and pipe laying—is equipped with a built-in tamping device which drops a weight of 175 pounds 45 times per minute, with a resultant impact of 380 foot-pounds.

Because of the gearing, these blows overlap considerably and both the force of the blows and their regularity are held absolutely uniform. It has been demonstrated that the Model 80 can replace as much, or more, dirt in the trench as was originally taken out.

It is often possible to pull the dirt in with the backfill scraper, as tamping progresses, thus creating practically a 100 per cent machine operation, adding materially to the savings.

The tamping boom is quickly movable, permitting tamping with the machine astraddle of the trench or as much as 3½ feet from the edge of trench.

The manufacturer claims that the cost of tamping with the Model 80 is at least 40 per cent less than by any other method.

For pipe placing, the boom and cable-winches of the Model 80 have been purposely made strong enough to permit the handling and laying of pipe, pulling of sheathing and other light crane-operations.

Complete information regarding this new machine can be secured by writing direct to The Cleveland Trencher Company, 20100 St. Clair Avenue, Cleveland, Ohio.

Research Fellows Appointed by Westinghouse Laboratories

APPOINTMENT of the third annual group of five Westinghouse Research Fellows has been made by the Westinghouse Research Laboratories. Selected from a group of forty-two applicants for fundamental research in physics, chemistry, mechanics, and metallurgy, the men are:

Dr. Jerald E. Hill, University of Rochester, for research in nuclear physics with the large electrostatic generator. Dr. Hill will be particularly interested in measuring thresholds and excitation functions for proton-neutron reactions.

Dr. Sidney Krasik, Cornell University, for research on fundamentals of velocity-modulated electron beams as generators of ultra high frequency radiations. Dr. Krasik has been associated with Professor L. P. Smith of Cornell in electronics research.

Dr. Walter Kauzmann, Princeton University, for research in application of the absolute reaction rate theory of chemical kinetics to liquid flow and solid plasticity problems. Dr. Kauzmann is also interested in the study of the solvent effect on optical rotatory power as a tool for studying molecular interactions in liquids.

Dr. Frederick W. Stallman, University of Illinois, for research in nuclear physics. Dr. Stallman is particularly interested in the study of the photo disintegration of the deuteron by gamma rays and of the angular distribution of the protons produced in this way.

Dr. David P. Stevenson, California Institute of Technology, for research in chemical bond resonance energies with the aid of the mass spectrometer. Dr. Stevenson is also interested in the study of resonance energies by use of gaseous electron diffraction methods.

G-E Exhibits Glass House at San Francisco Fair

A "PHANTOM house" built of plate glass heads the spectacular features listed for the new $250,000 General Electric exhibit in preparation for the 1940 Golden Gate International Exposition.

Robert L. Smallman, who has just been named manager of the exhibit, lists the features scheduled as follows:

The "Phantom House," a full-size five-room model home of ultramodern design, with outside and inside walls of transparent glass, beautifully decorated and electrically equipped throughout. A bevy of beautiful hostesses will conduct visitors through the glass house.

The largest light in the world, 50,000 watts, lighted at regular intervals for first time in the West.

New production of the "House of Magic," half-hour scientific stage show with latest developments from the General Electric research laboratories.

Broadcasting under glass from a new "fish-bowl" studio at KGEI, international broadcasting station transmitting Exposition programs to Latin America, Asia, the Antipodes and South Africa.

Animated "light-conditioning" display, contrasting old and modern home lighting methods.

Replica of Edison's laboratory, with old-fashioned glass blower making the first electric lamps just as Edison did.

A "Magic Kitchen," which "talks and walks."

"Tire-o-Scope," device which X-rays automobile tires for hidden nails, glass, cuts, and weak spots.

Cascade at Tower of Light Rivals Famous Waterfalls

A SCENIC cascade higher than many famous waterfalls, and only 50 feet lower than Niagara Falls, yet so skillfully designed that spectators who stand a few feet from its base will not be sprayed with water, will be a feature of the Singing Tower of Light at the Westinghouse Building at the World's Fair.

The cascade will shimmer at night in white light produced by a series of powerful tiny mercury arc lamps. Its revolutionary design, embracing a series of 15 waterfalls each eight feet tall, and set vertically one above the other, makes it the first of its kind in the world.

Four centrifugal, 75-horsepower pumps, possessing a combined pumping capacity of 12,500 gallons of water per minute, will feed water to the falls.

In that case, gentlemen, you need

CRESCENT IMPERVEX

Moisture Resisting Rubber Covered BUILDING WIRE

Now, this superior insulation is available for building wires where they are to be installed in moist locations and where lead sheath is not acceptable. CRESCENT IMPERVEX building wire is especially suitable for replacing lead sheathed wires in existing conduits when increasing the capacity of the system. Due to its smaller overall diameter, more wires of the same size or wires of larger gauge may be used.

CRESCENT INSULATED WIRE & CABLE CO. INC
TRENTON, NEW JERSEY

ADEQUATE WIRING SERVES AND SAVES

- CONTROL CABLE
- DROP CABLE
- LEAD COVERED CABLE
- MAGNET WIRE
- PARKWAY CABLE
- RUBBER COVERED POWER CABLE
- SERVICE ENTRANCE CABLE
- SIGNAL CABLE
- VARNISHED CAMBRIC CABLE
- WEATHERPROOF WIRE

All types of Building Wire and all kinds of Special Cables to meet A.S.T.M., A.R.A., I.P.C.E.A., N.E.M.A., and all Railroad, Government and Utility Companies' Specifications.

Send for New Bulletin on CRESCENT IMPERVEX

Truck Buyers Demand Facts—

CHEVROLET GIVES

Certified Proof!

See your Chevrolet dealer for a copy of the booklet "Certified Proof." It contains all of the figures relative to Chevrolet truck test runs.

AAA

Here are facts about Chevrolet truck performance on the longest truck test run ever conducted under the supervision of the American Automobile Association, using a stock 1½-ton Chevrolet truck, and traveling through Canada, Mexico, and every State in the Union.

Number of miles	100,015.9
Payload (exclusive of driver and observer)	4590 lb.
Gross weight (with driver and observer)	9260 lb.
Average speed	33.07 miles per hour
Average miles per gallon of gasoline	15.10
Oil actually consumed	93.29 quarts
Total cost for repairs, replacements (including twelve tires), gas, oil and lubrication	$0.00419 per ton-mile

These facts prove conclusively that Chevrolet trucks are low in operating and maintenance costs, and are exceptionally dependable and durable under the hardest usage.

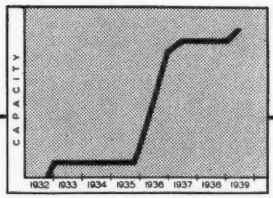
CHEVROLET MOTOR DIVISION, *General Motors Sales Corporation*, DETROIT, MICHIGAN

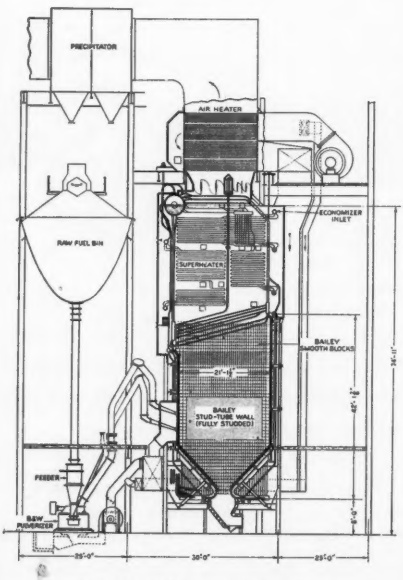
CHEVROLET **BEST HAULERS • BEST SAVERS • BEST SELLERS**

Trend of

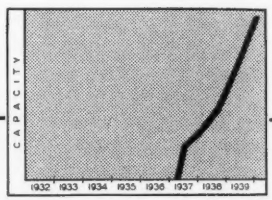
The illustrations on these pages show the trend in design of B&W Boiler units for central-station service and the rate of acceptance of each design as indicated by the charts showing the cumulative total of steam-generating capacity ordered.

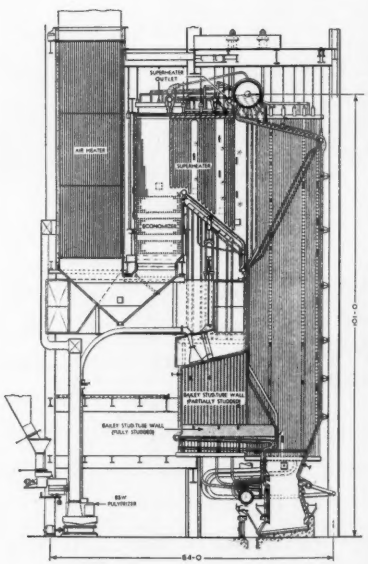
The charts indicate that when new types of equipment, such as boilers, show in operation unmistakable evidence of fundamental





Twenty B&W High-Head Boilers in service or on order have a combined capacity of almost 8,000,000 lb. of steam per hr.





Twenty-two B&W Radiant Boilers having a total capacity of over 8,500,000 lb. of steam per hr. are in service or on order.

THE BABCOCK & WILCOX COMPANY... 85 LIBERTY STREET... NEW YORK, N. Y.

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design and construction.

PROFESSIONAL DIRECTORY (*continued*)

(*Concluded on following page*)

PROFESSIONAL DIRECTORY *(concluded)*

INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

*Fortnightly advertisers not in this issue.

1940

56
36
33
7

32
29

54
21

55
40
30

24
22
47

41
30

48
37
9
26
19
53
35

55
50
55
over
56
47
55
38

11

25
15
56

The New, Small INTERNATIONAL TD-6 DIESEL TracTracTor

International Harvester's new small TD-6 Diesel TracTracTor is the best news in a long time for users who need the powerful versatility of a small crawler with the fuel economy of International's *full* Diesel engine.

The TD-6, smallest of International's four new Diesel crawler tractors, is only 104 inches long . . . a flexible, easily maneuvered unit for working in close quarters. It gets its smooth-flowing power from the International *full* Diesel engine. That means operating costs are cut right from the start. You save on fuel; you get the added International quick-starting feature.

Fast gear shifting, five forward speeds, operator comfort, accessible controls, and adjustable levers and pedals are other features that combine to make the TD-6 the outstanding crawler value in its class. See the nearby International industrial power dealer or Company-owned branch for information on the TD-6 and its three larger brothers in the International line.

INTERNATIONAL HARVESTER COMPANY
(Incorporated)
180 North Michigan Avenue, Chicago, Illinois

INTERNATIONAL HARVESTER

FOR DISTINGUISHED SERVICE

This 2½-pound first-stage bucket is capable of developing more than 600 horsepower. Steam pressure, 1200 pounds; temperature, 950 F

THE present-day turbine buc
is in itself the highest trib
that can be paid to the designer,
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